

Figure 1

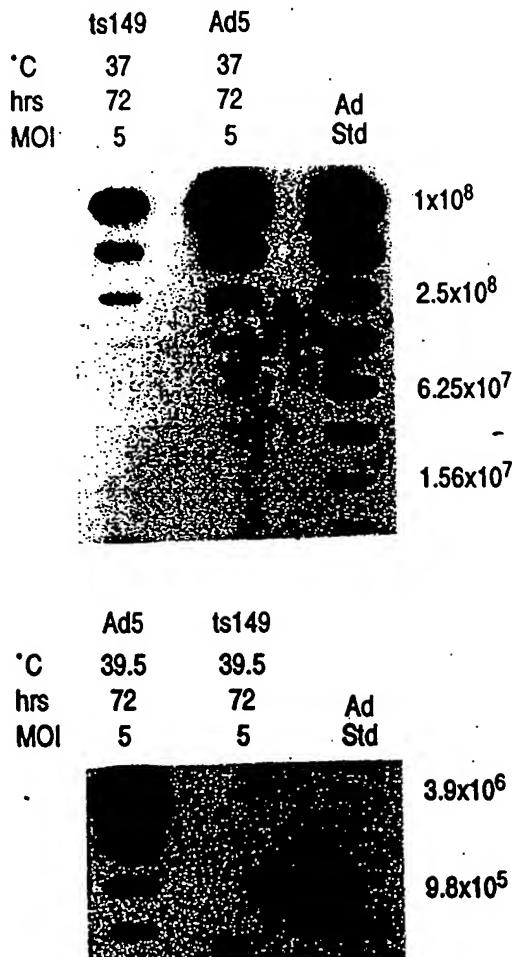


Figure 2

ts149	Ad5	ts149	
39.5	37	39.5	°C
72	72	96	hrs
5	10	20	40
5	5		MOI

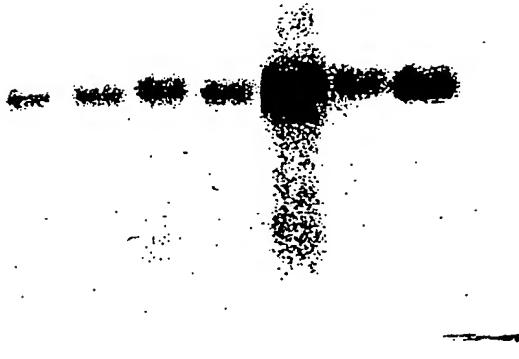


Figure 3

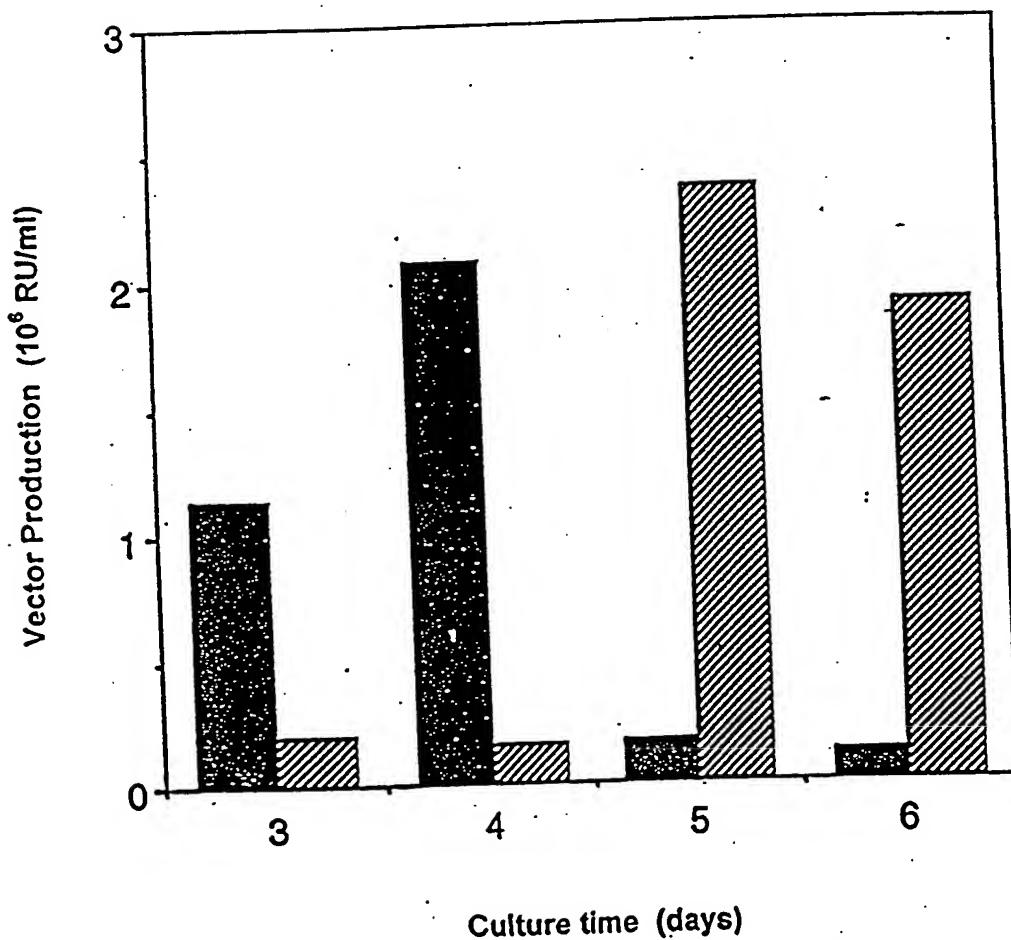


Figure 4

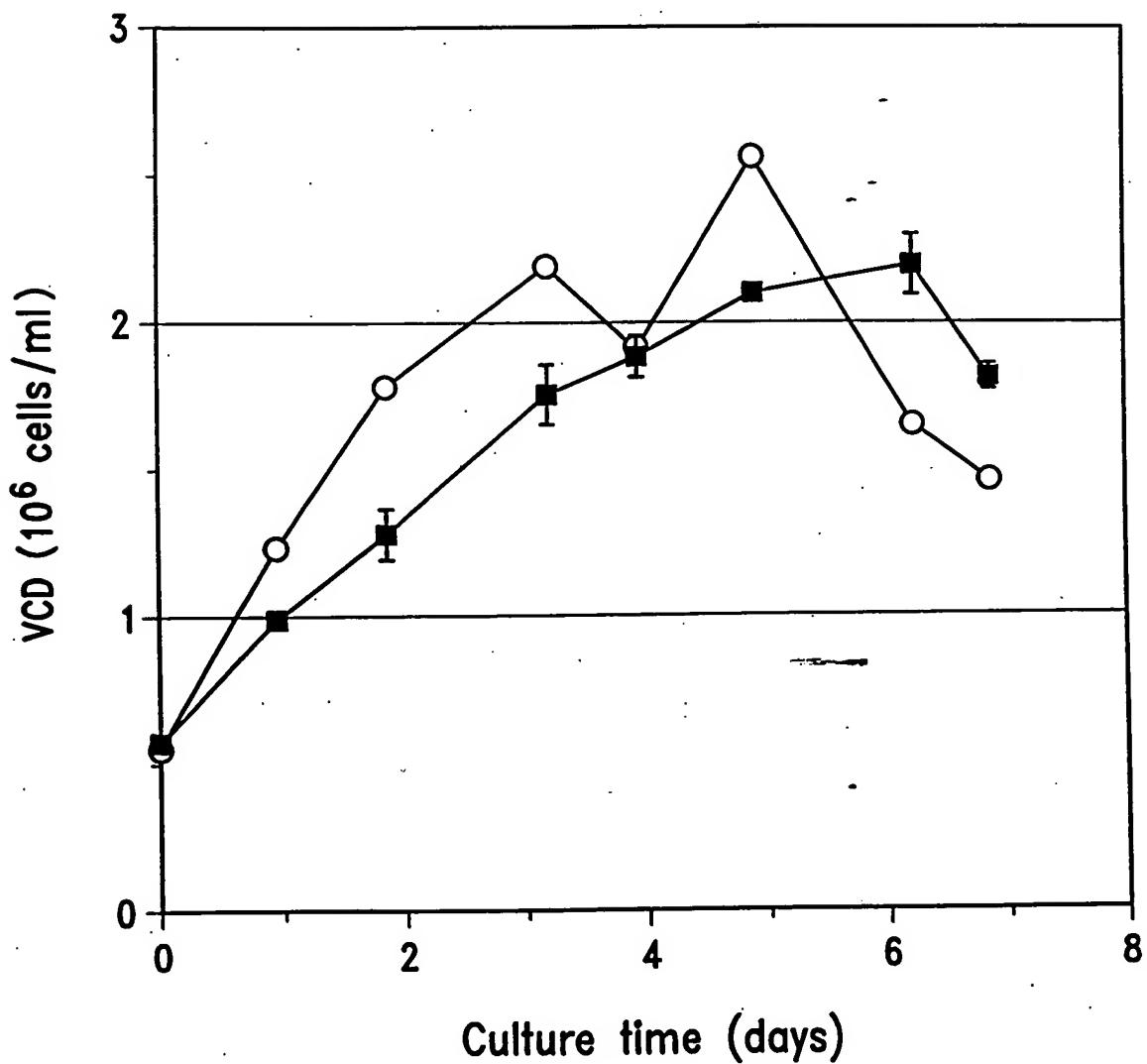


Figure 5

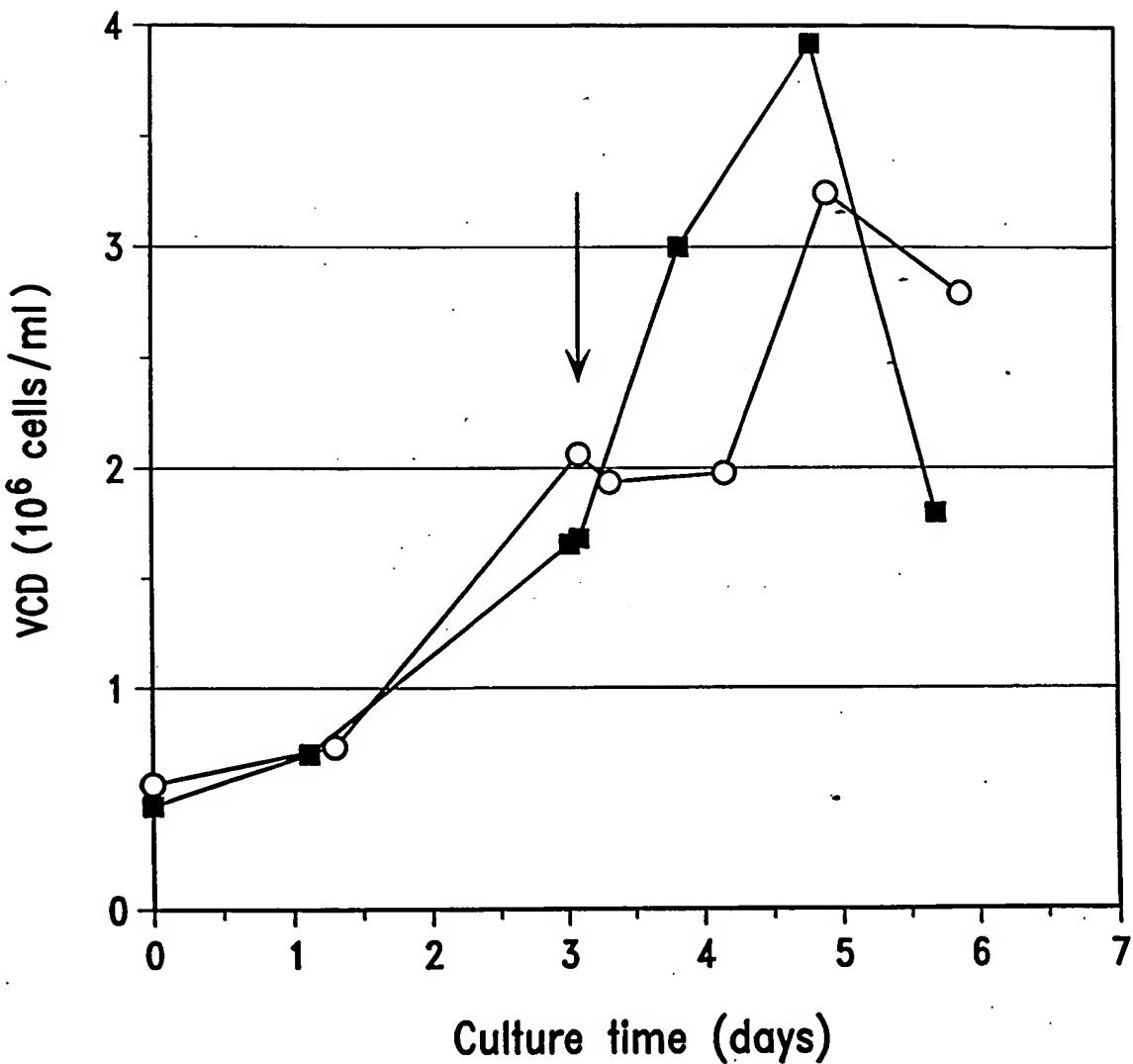


Figure 6

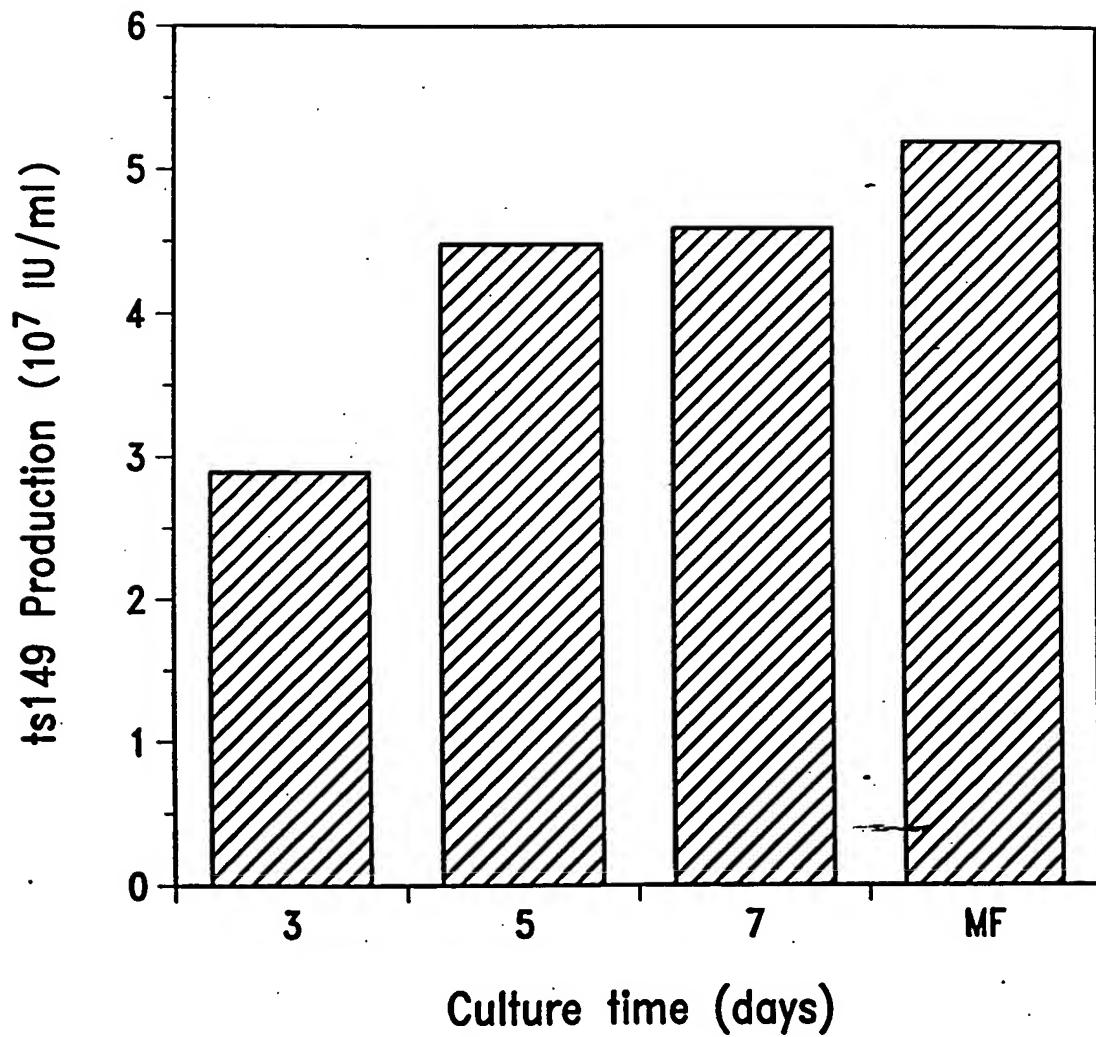


Figure 7

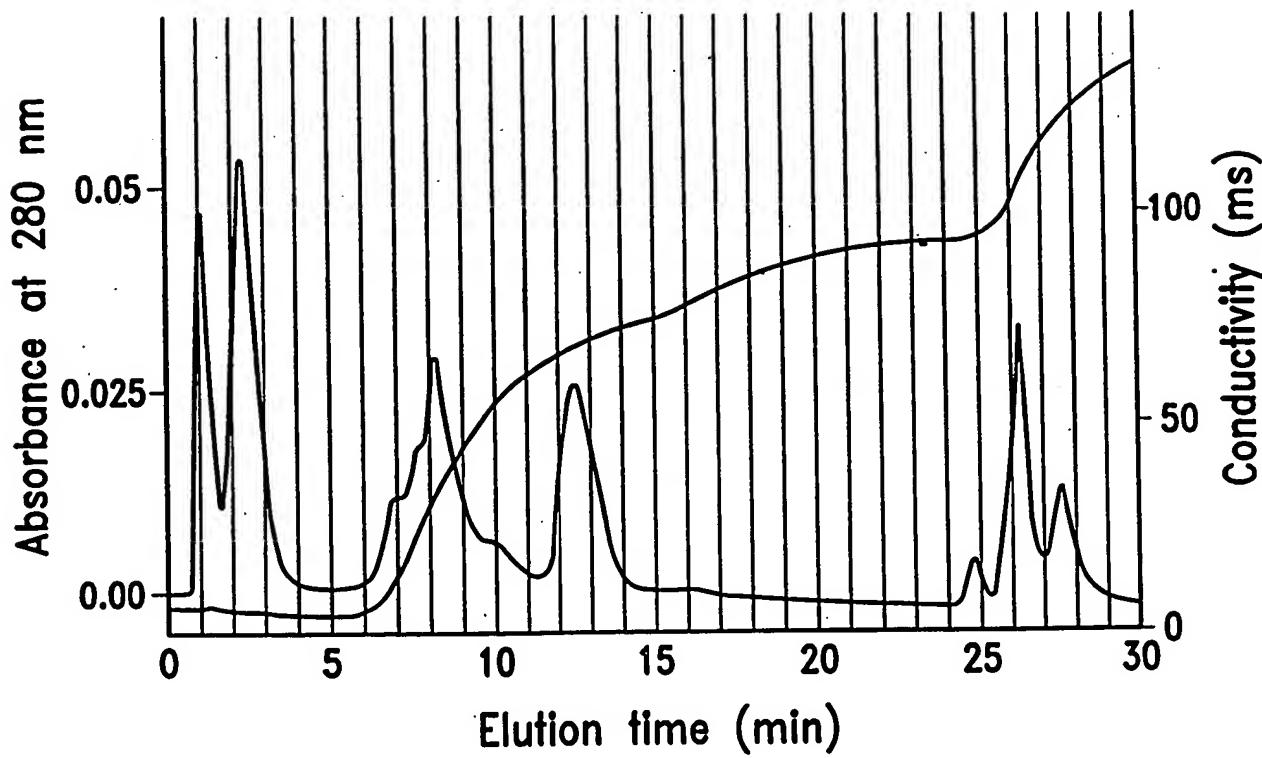
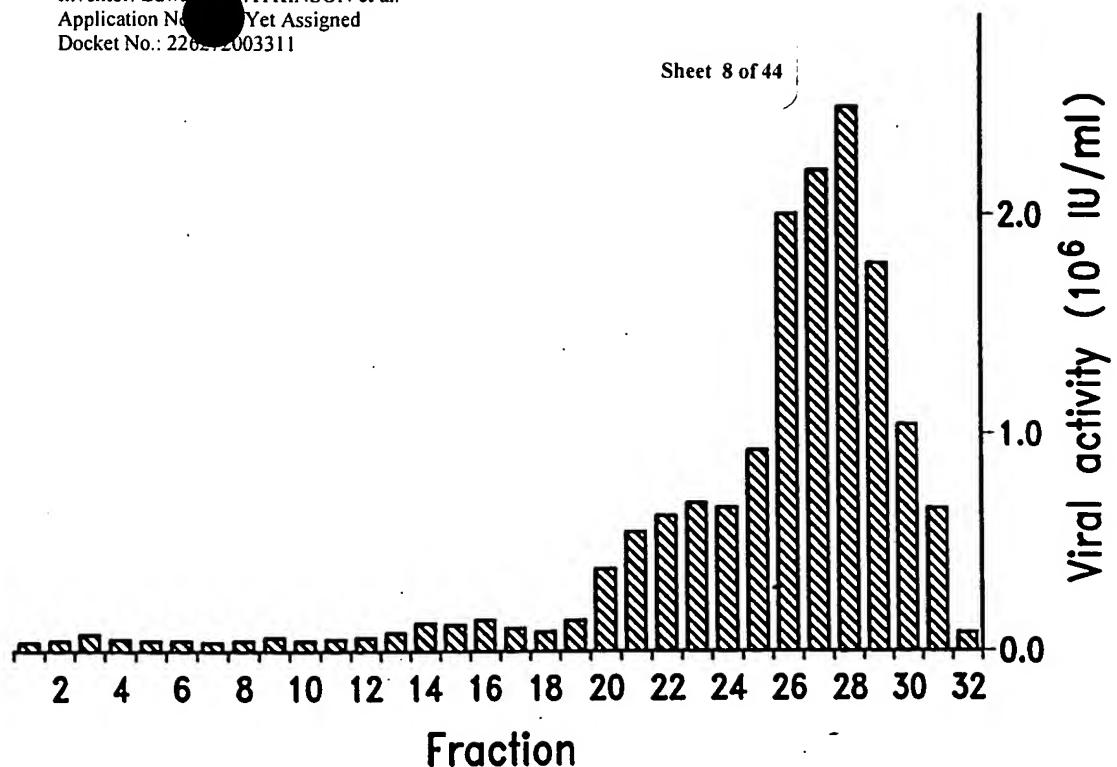


Figure 8

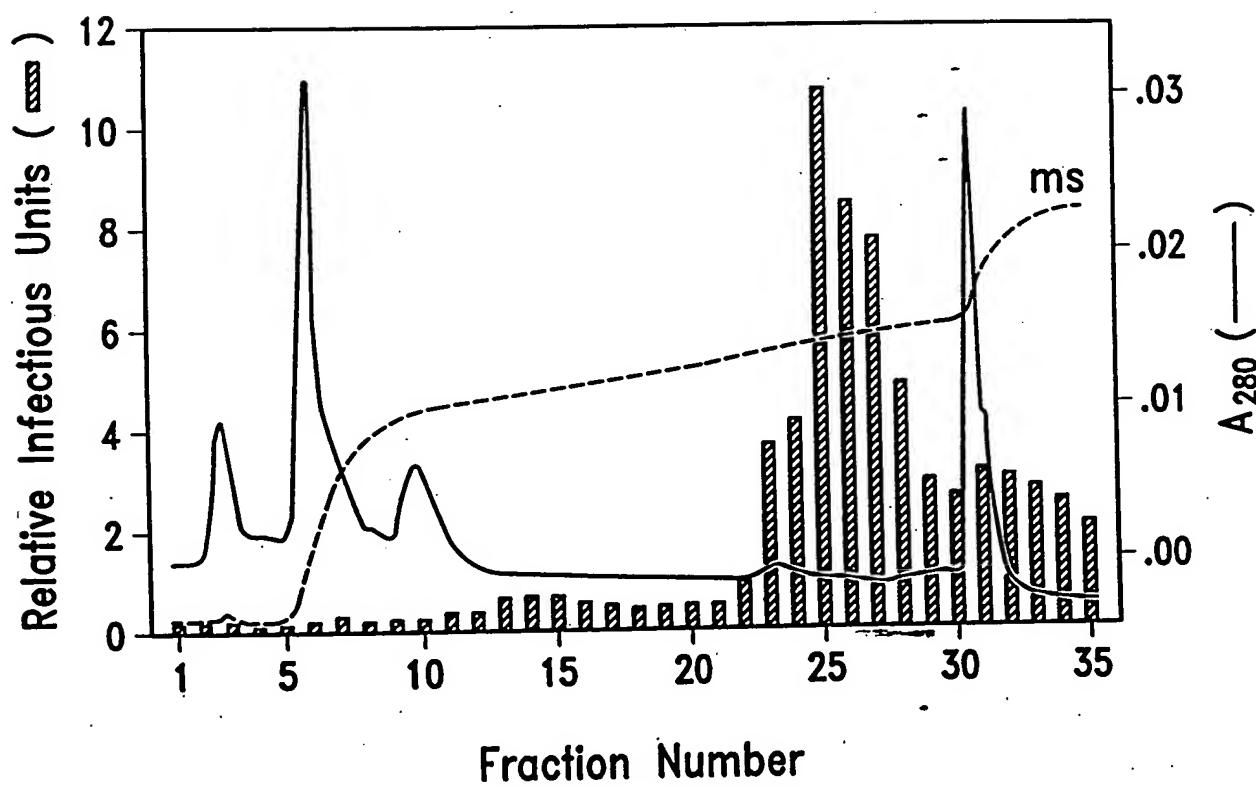


Figure 9

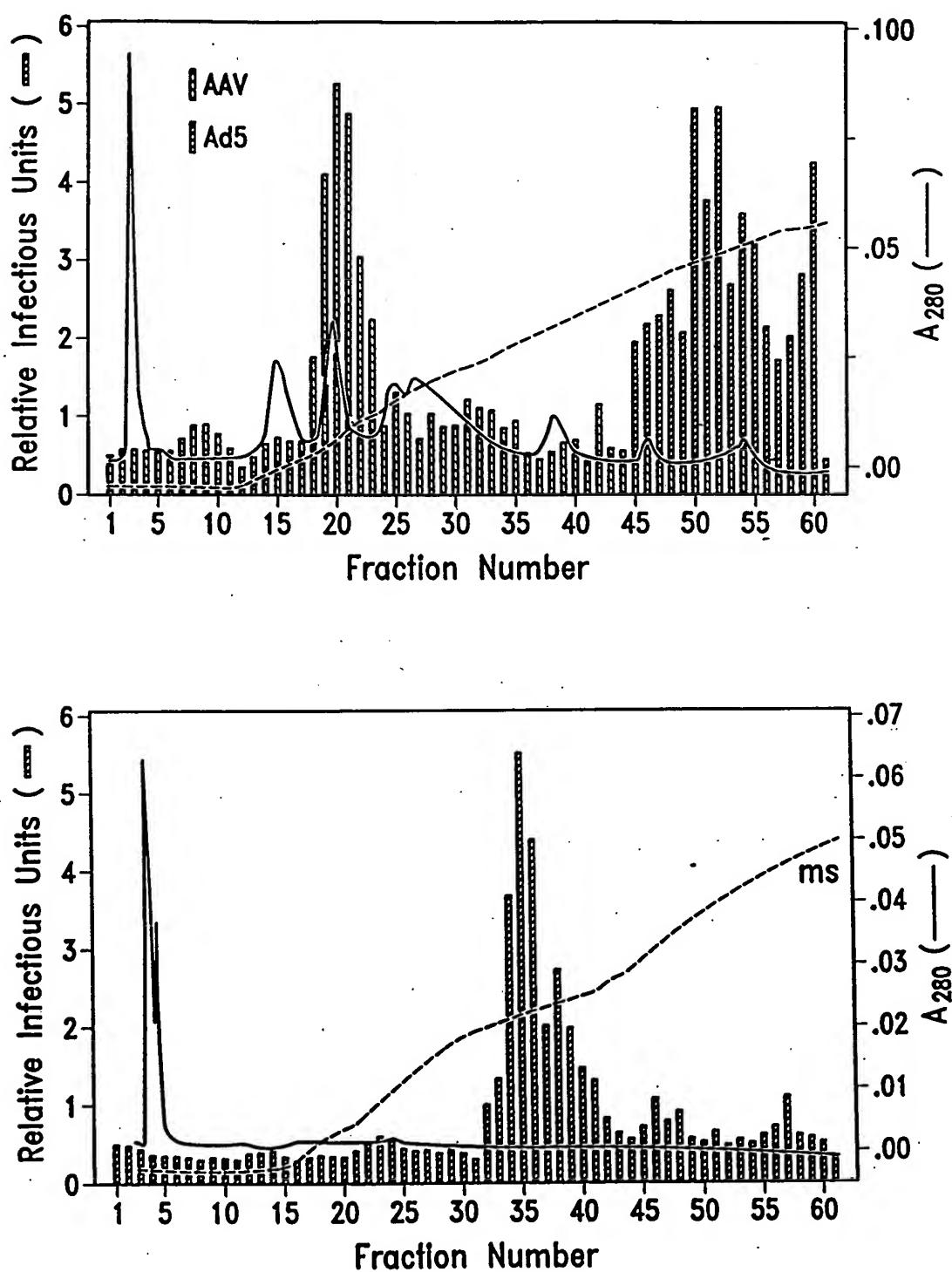


Figure 10

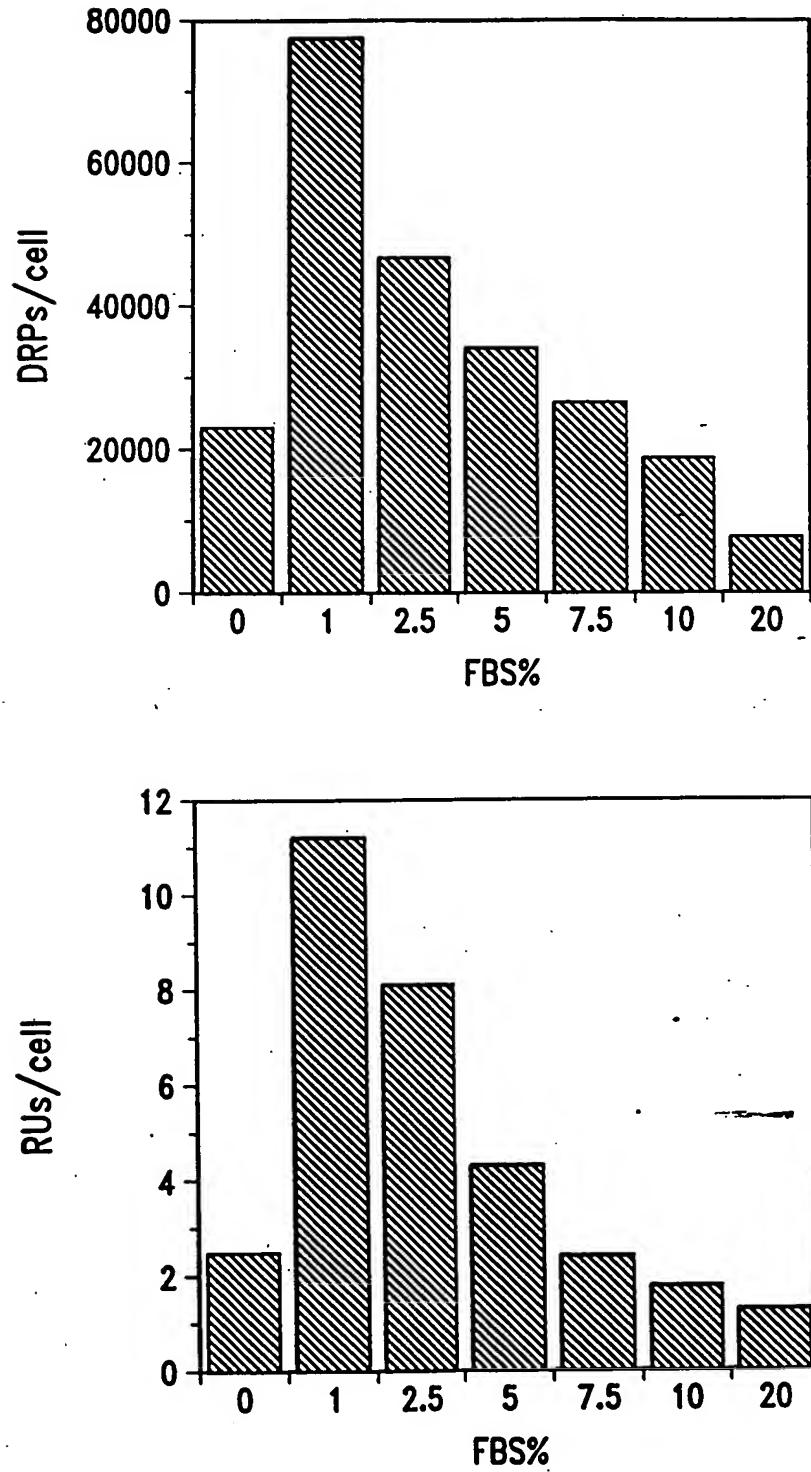


Figure 11

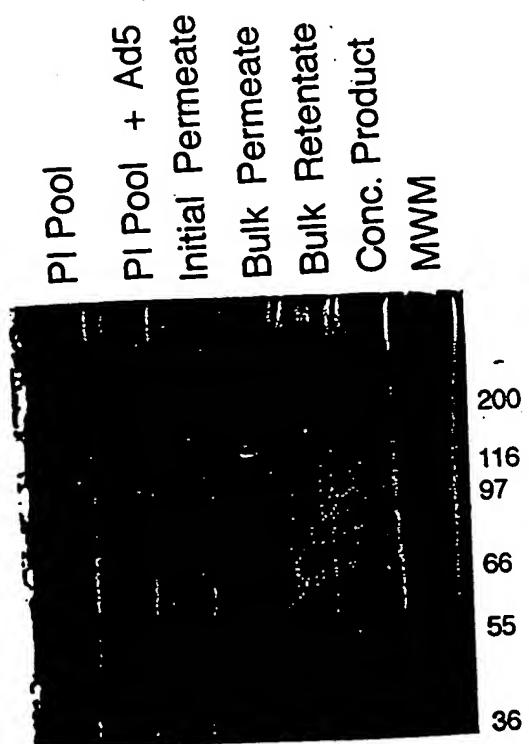


Figure 12

52471c2.bio - 2000.0 $\mu$ l 1:AAV FILTR

RECORDED BY COMPUTER

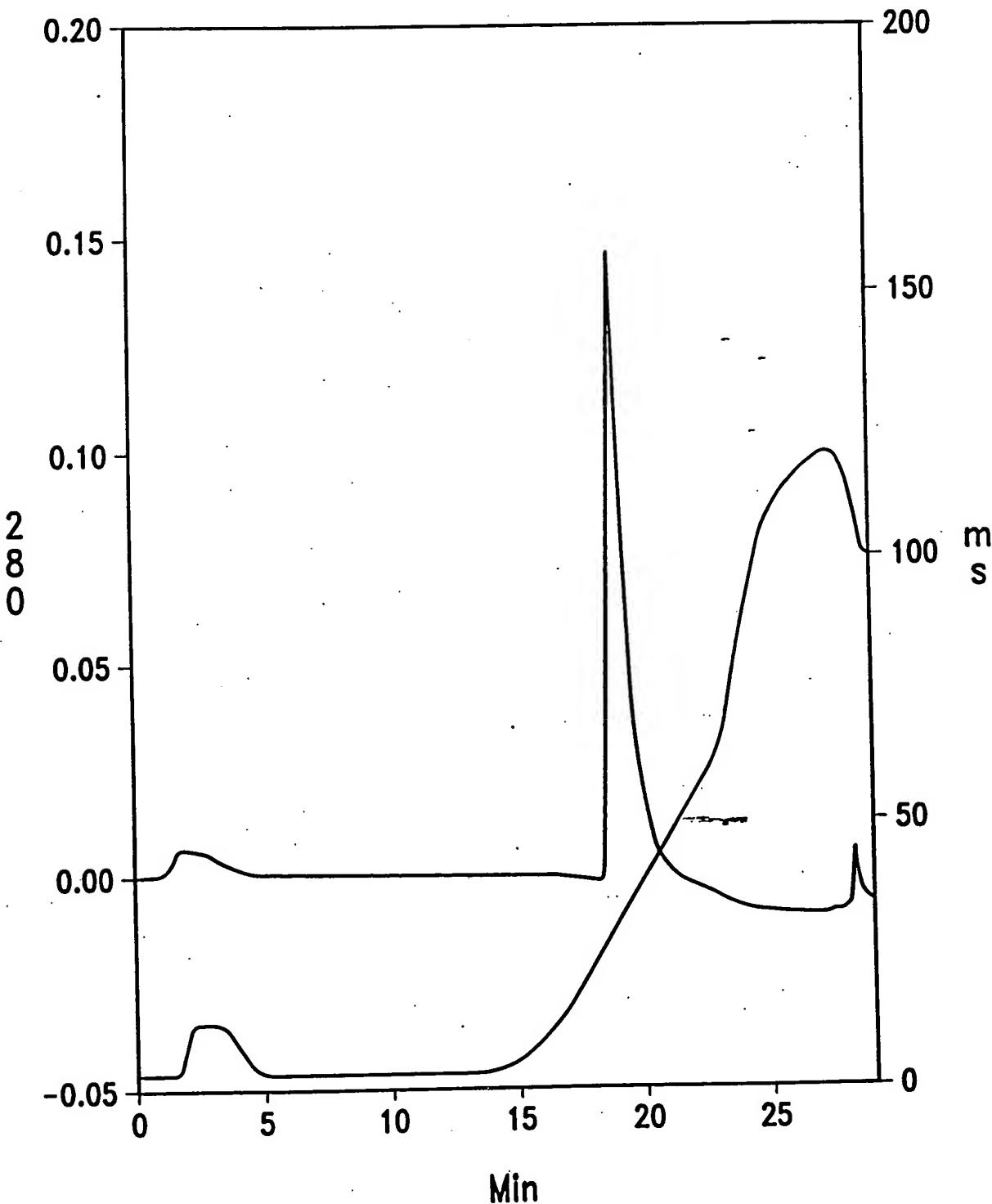
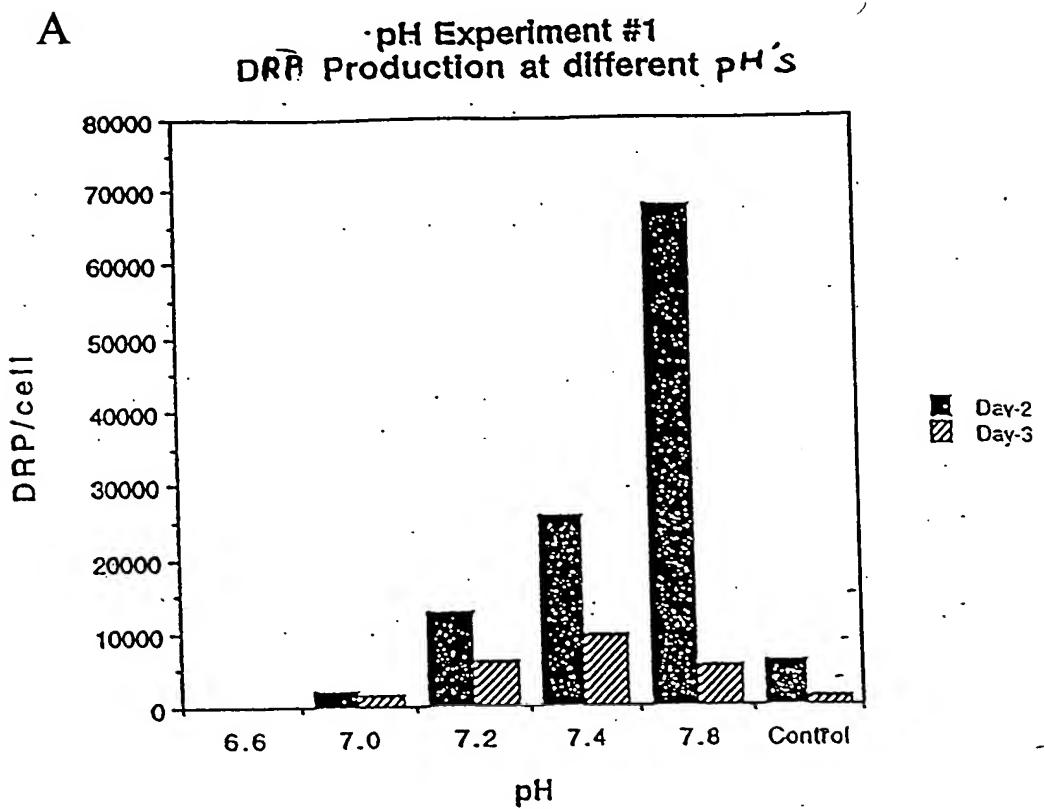


Figure 13

A



B

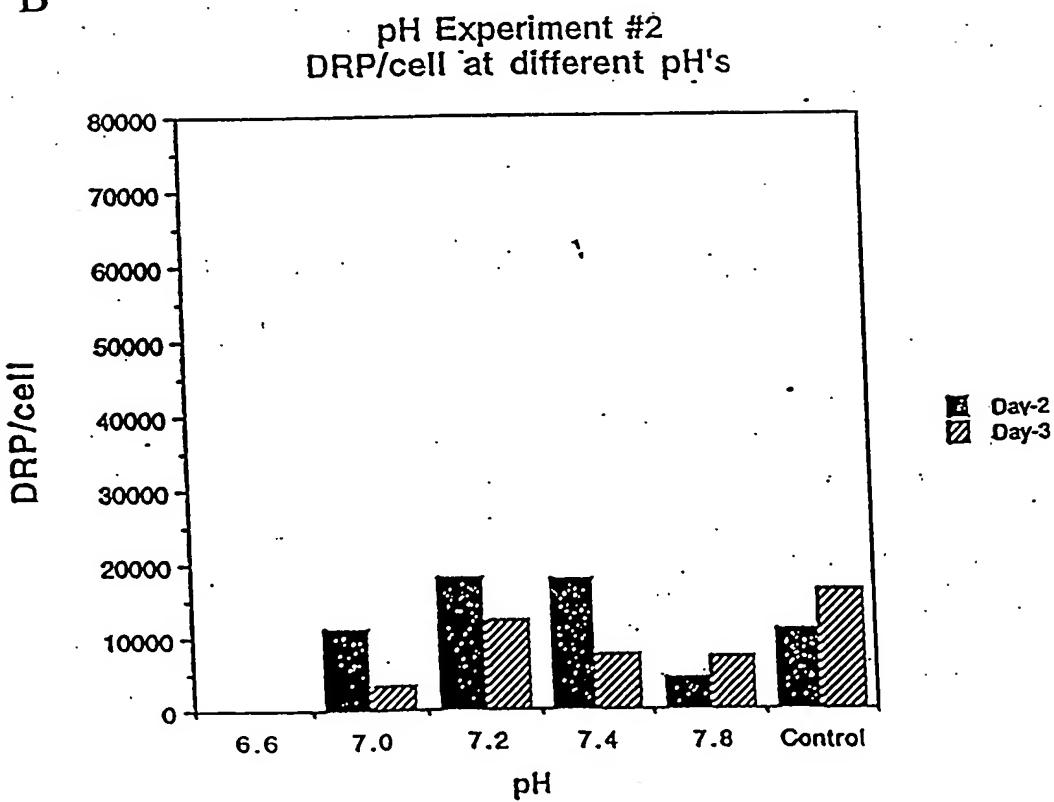
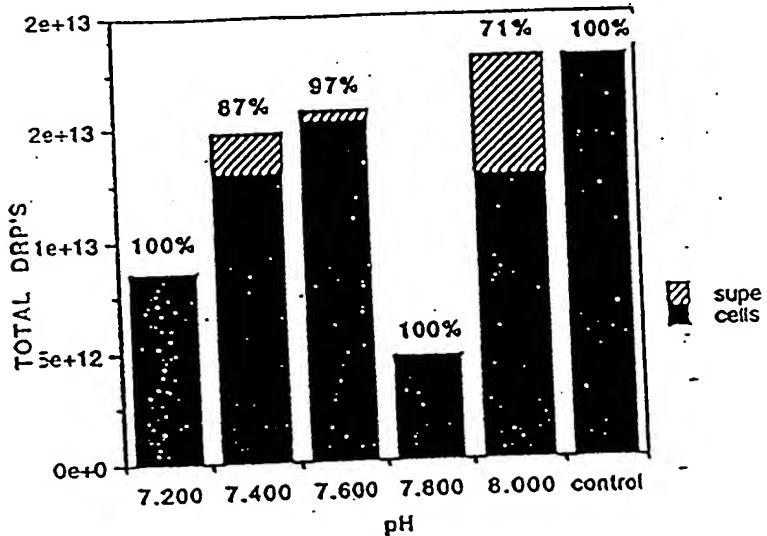


Figure 14

A

CFTR JL-14 REACTOR pH EXPERIMENT #3  
DISTRIBUTION OF VECTOR IN CELLS/SUPE  
TOTAL CULTURE DRP'S DAY 2



B

CFTR JL-14 REACTOR pH EXPERIMENT #3  
DISTRIBUTION OF VECTOR IN CELLS/SUPE  
TOTAL CULTURE DRP'S DAY 3

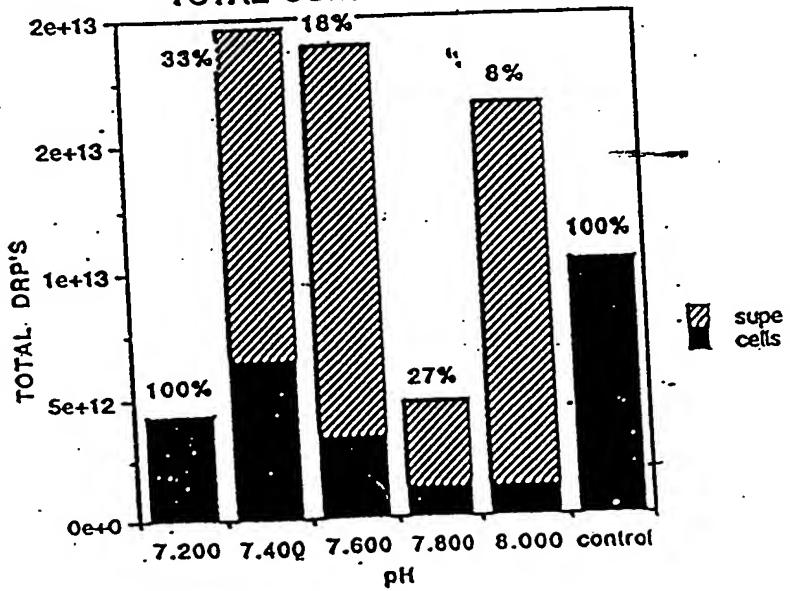
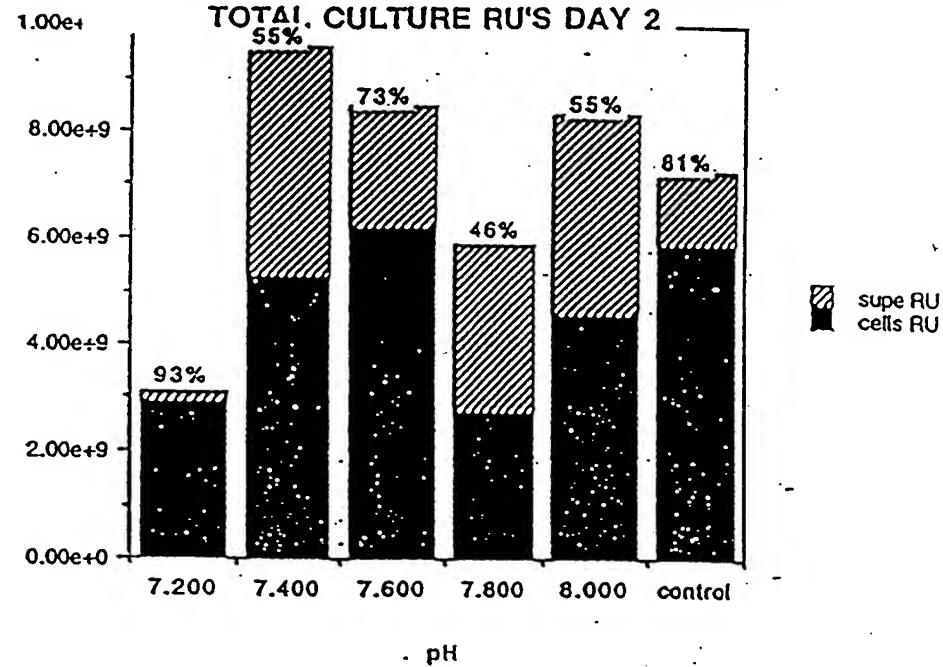


Figure 15

A

CFTR JL-14 REACTOR pH EXPERIMENT #3  
DISTRIBUTION OF VECTOR IN CELLS/SUPE



B

CFTR JL-14 REACTOR pH EXPERIMENT #3  
DISTRIBUTION OF VECTOR IN CELLS/SUPE

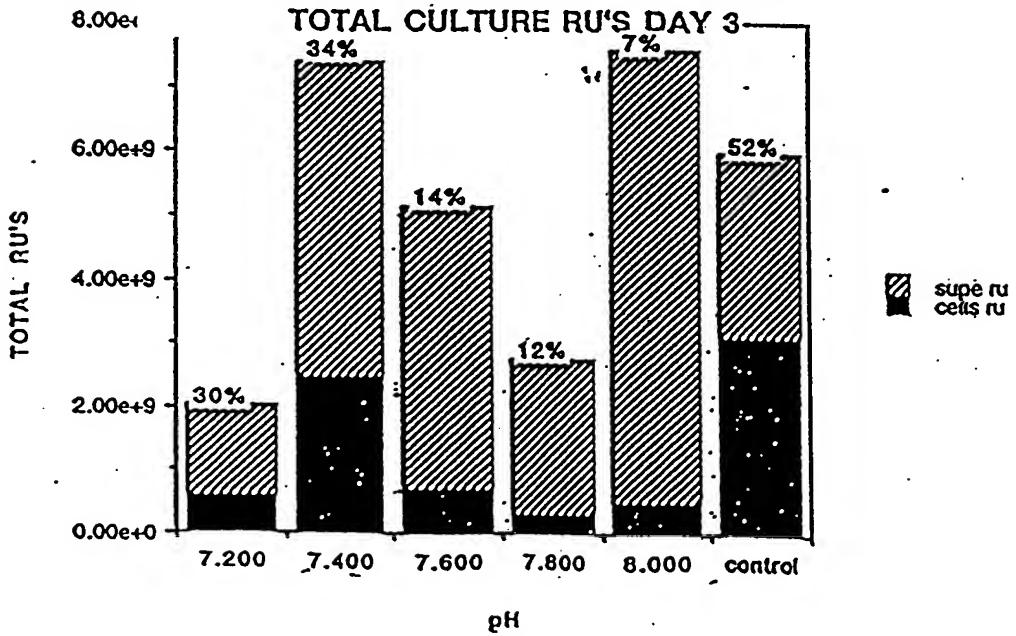


Figure 16

CFTR JL-14 REACTOR pH EXPERIMENT #3  
DAY 3 PARTICLE TO INFECTIVITY  
SUPERNATANT AND CELLS

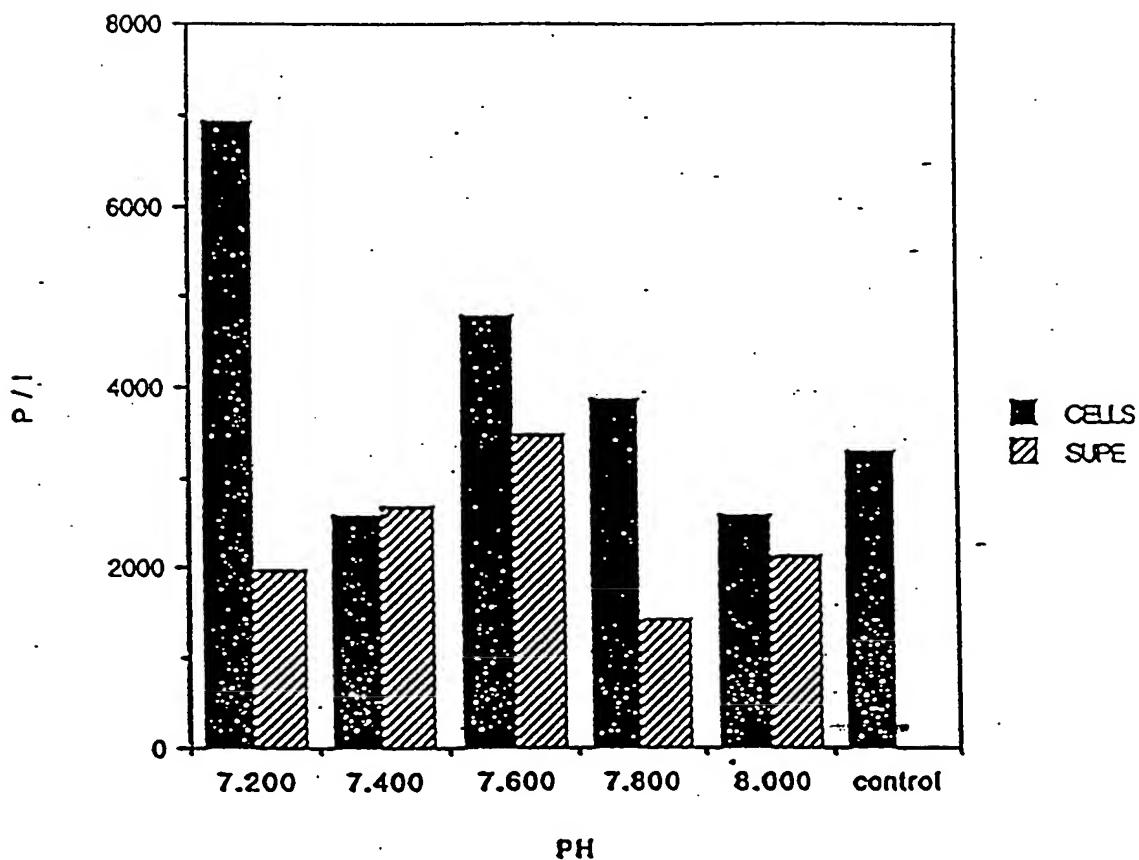
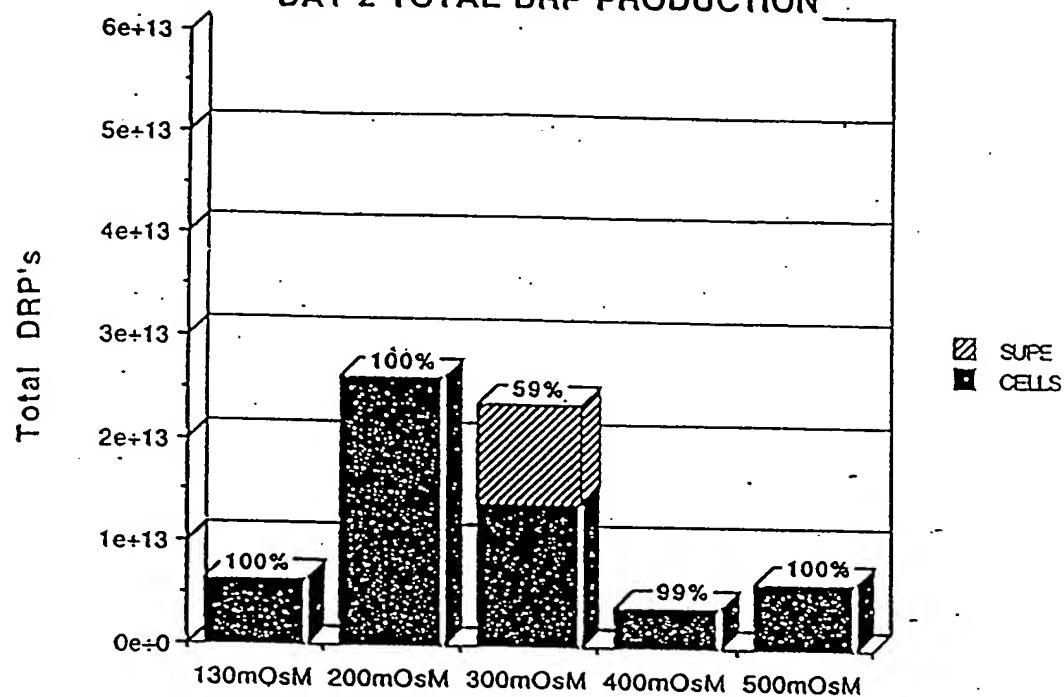


Figure 17

A

CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 2 TOTAL DRP PRODUCTION



B

CFTR JL-14 BIOREACTOR, EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 3 TOTAL DRP PRODUCTION

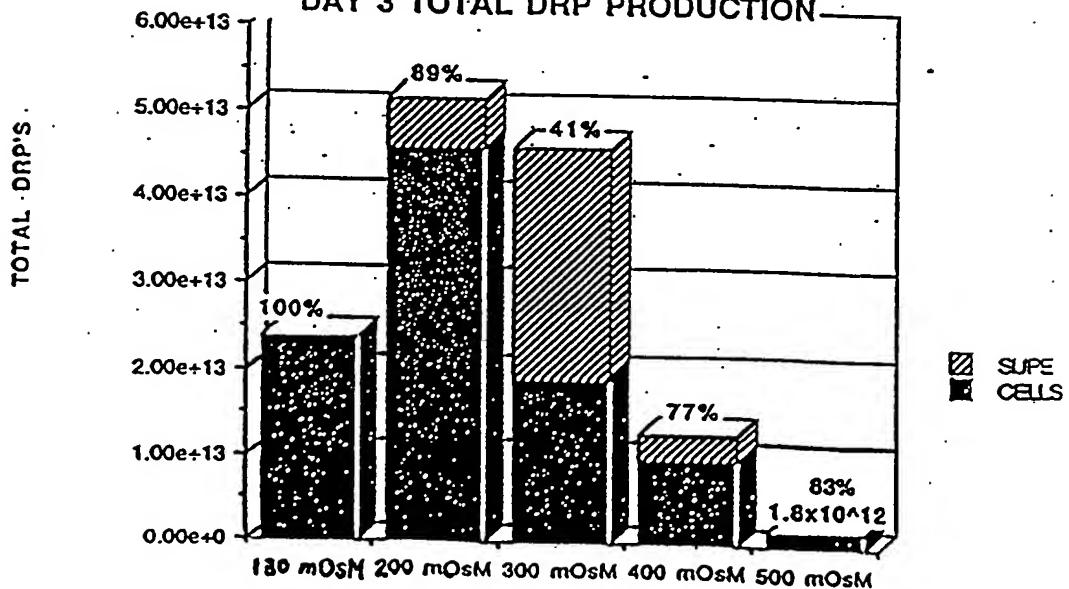


Figure 18

CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 4 TOTAL DRP PRODUCTION

REPORT #264000001

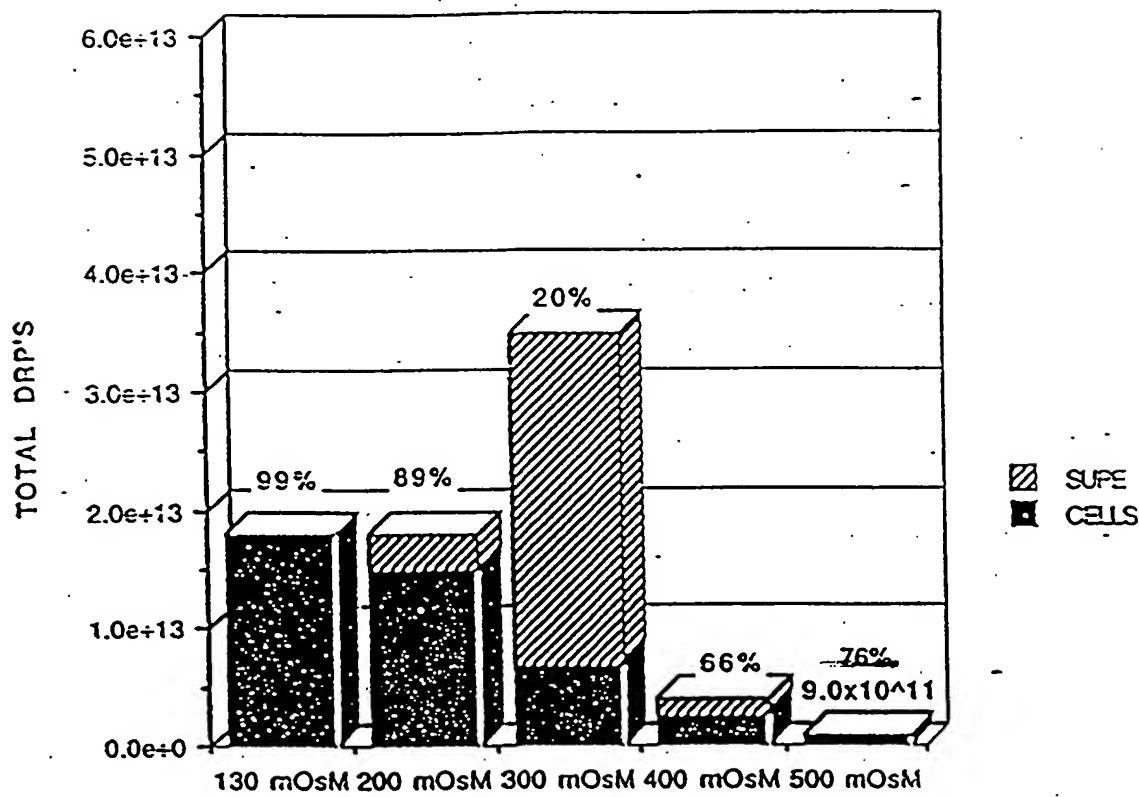
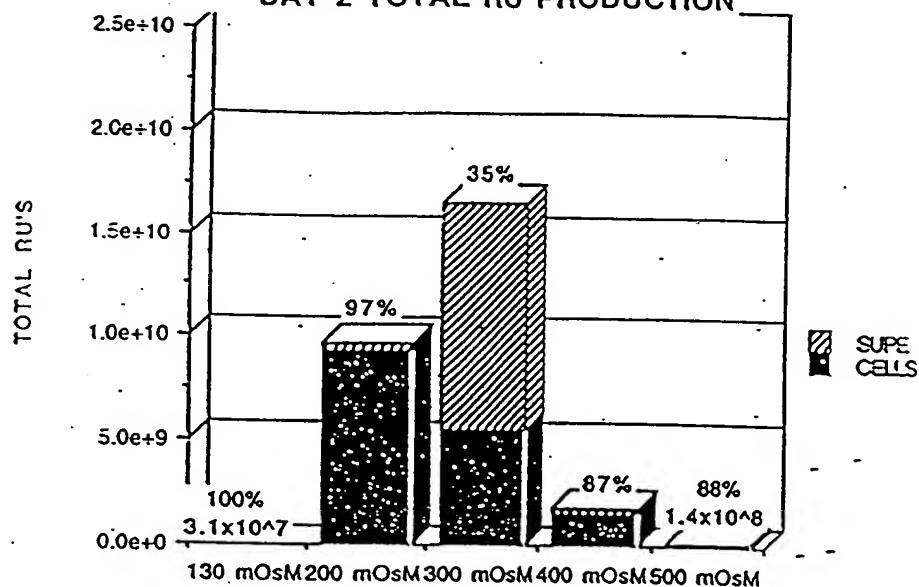


Figure 18C

**A CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 2 TOTAL RU PRODUCTION**



**B CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 3 TOTAL RU PRODUCTION**

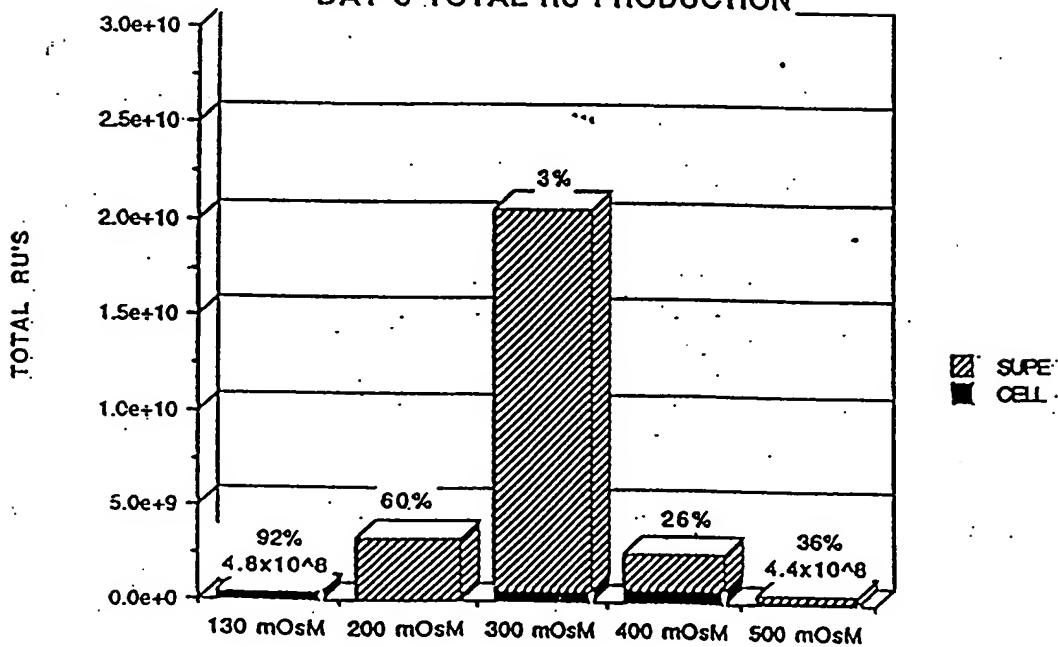


Figure 19

CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 4 TOTAL RU PRODUCTION

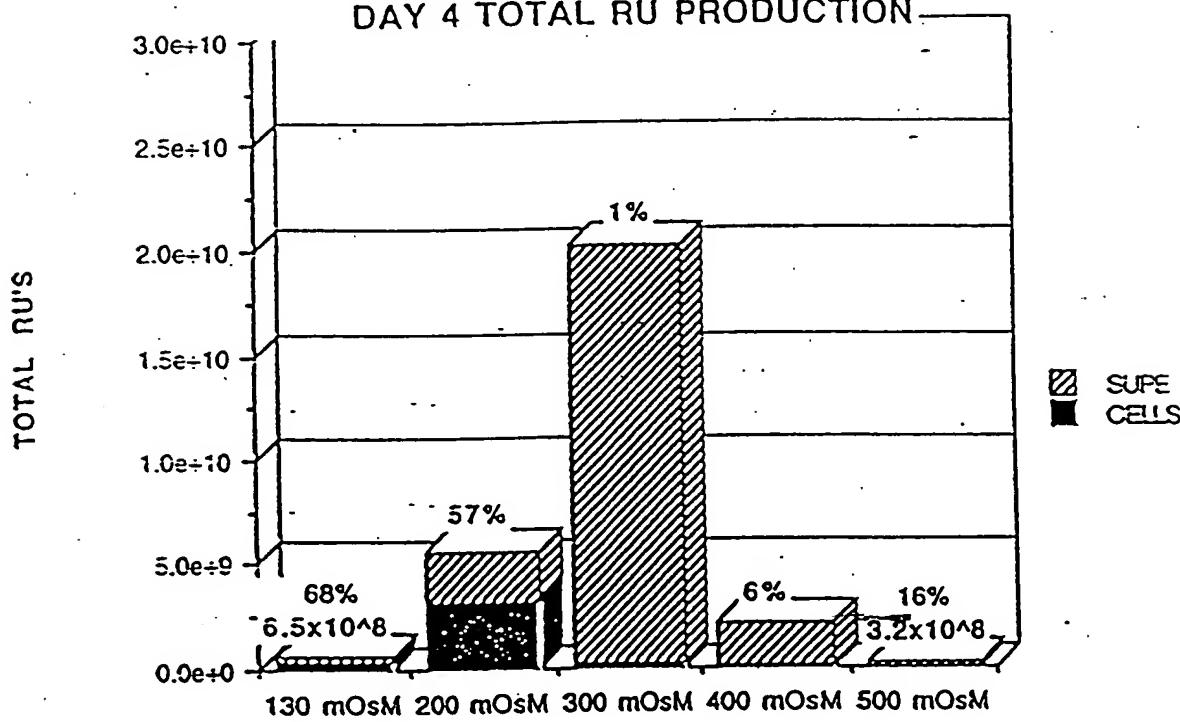


Figure 19C

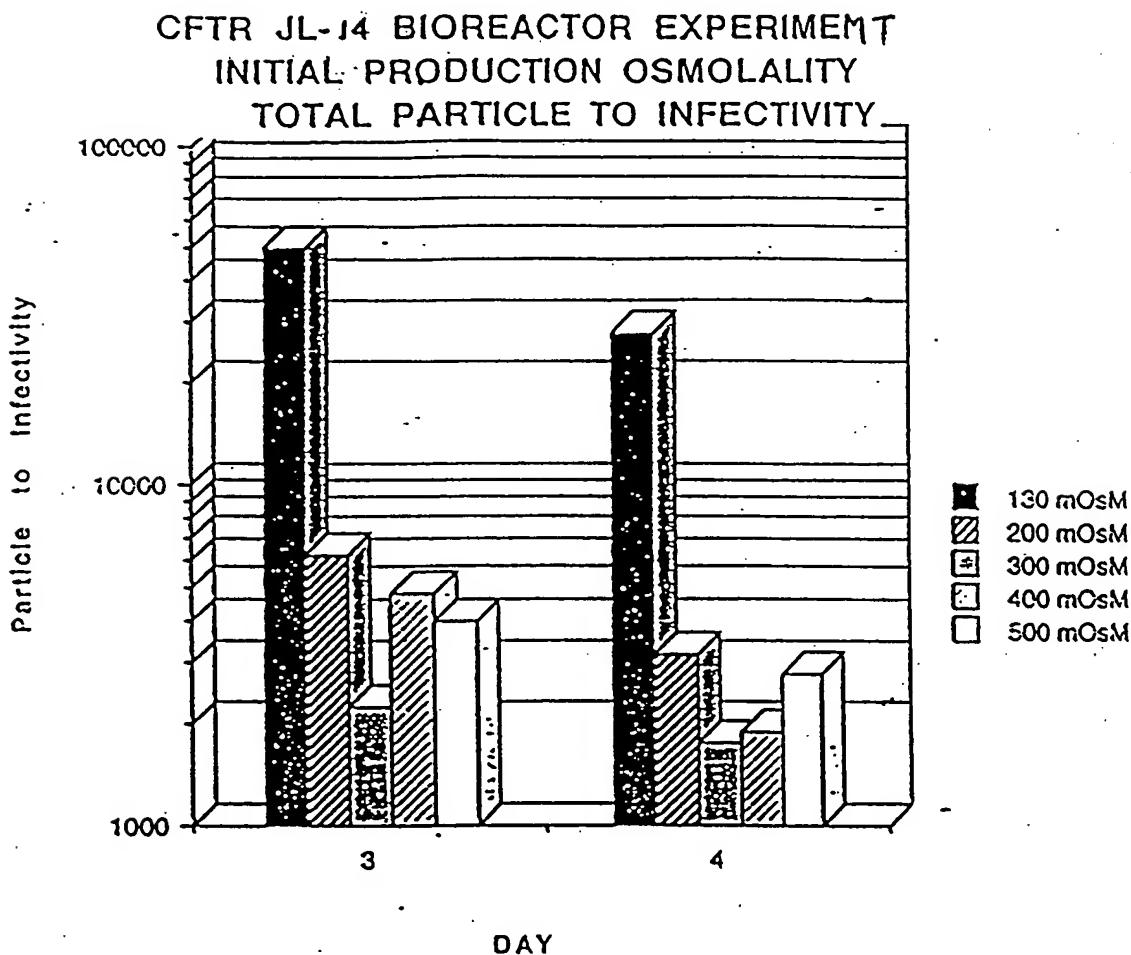
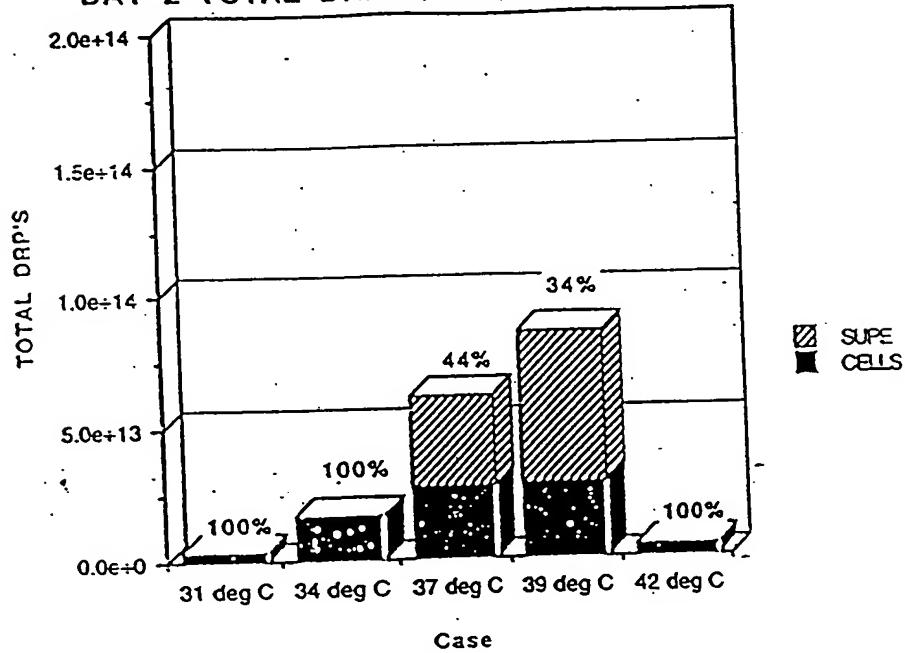


Figure 20

A

CFTR JL-14 REACTOR EXP. TEMPERATURE  
DAY 2 TOTAL DNASE RESISTANT PARTICLES



B

CFTR JL-14 REACTOR EXP. TEMPERATURE  
DAY 3 TOTAL DNASE RESISTANT PARTICLES

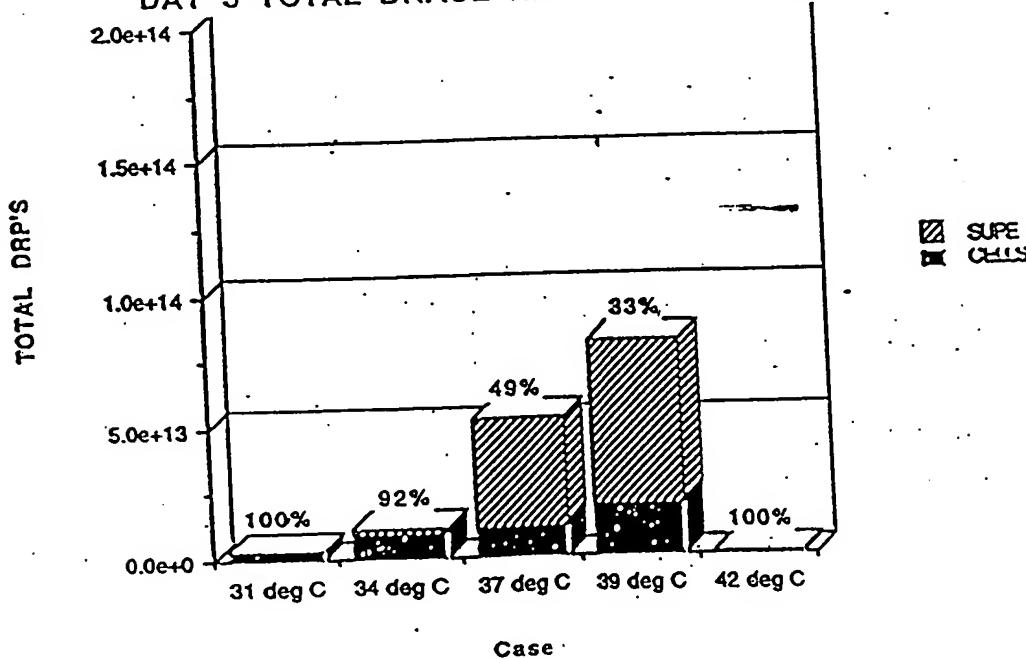


Figure 21

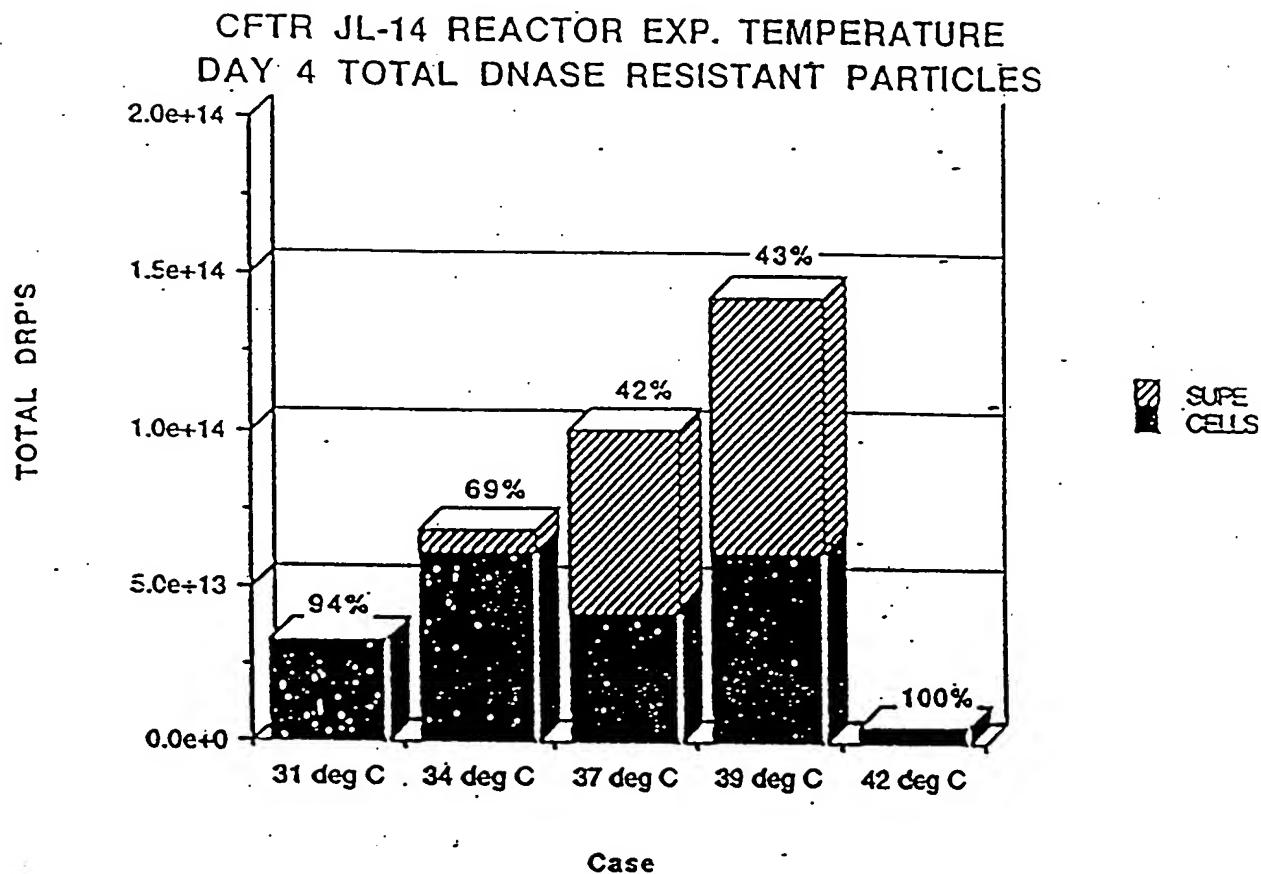


Figure 21C

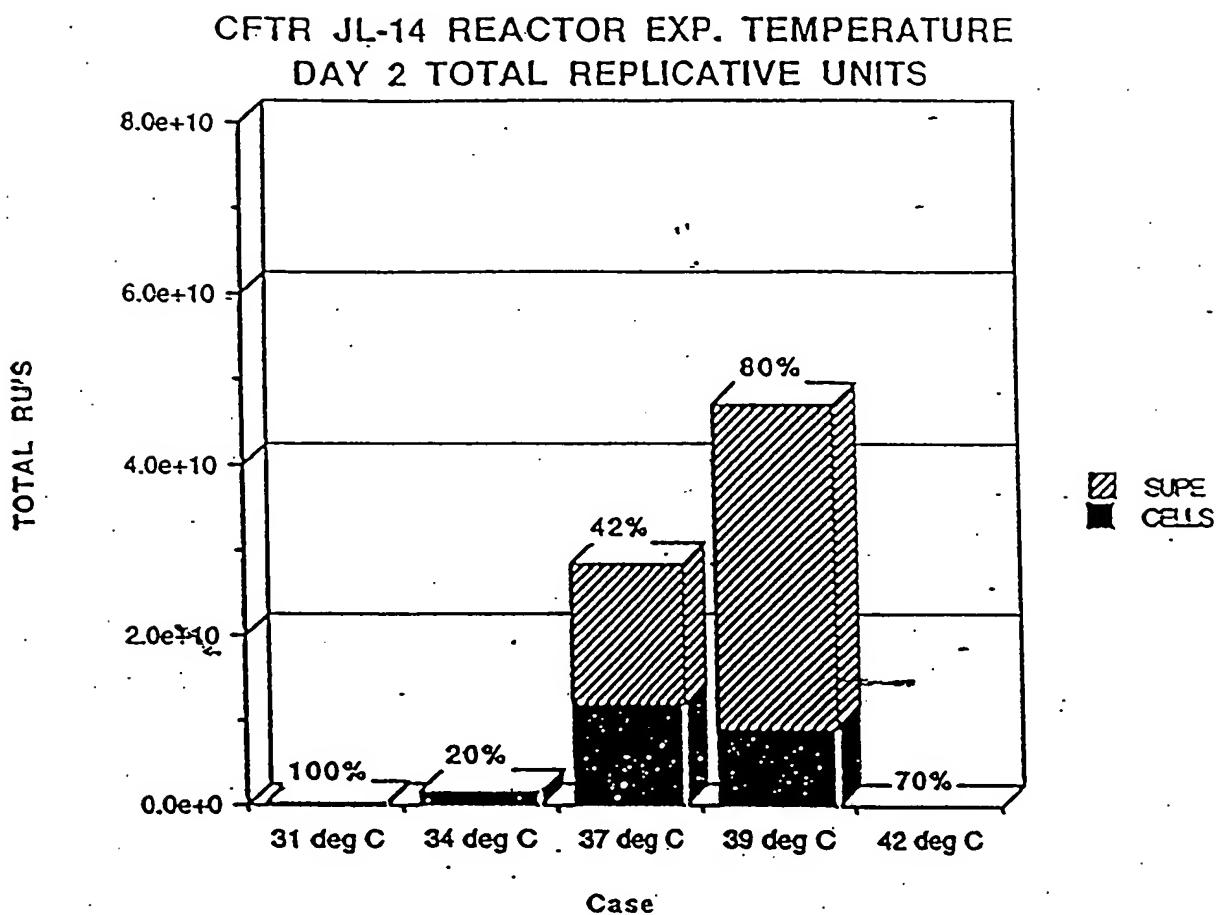
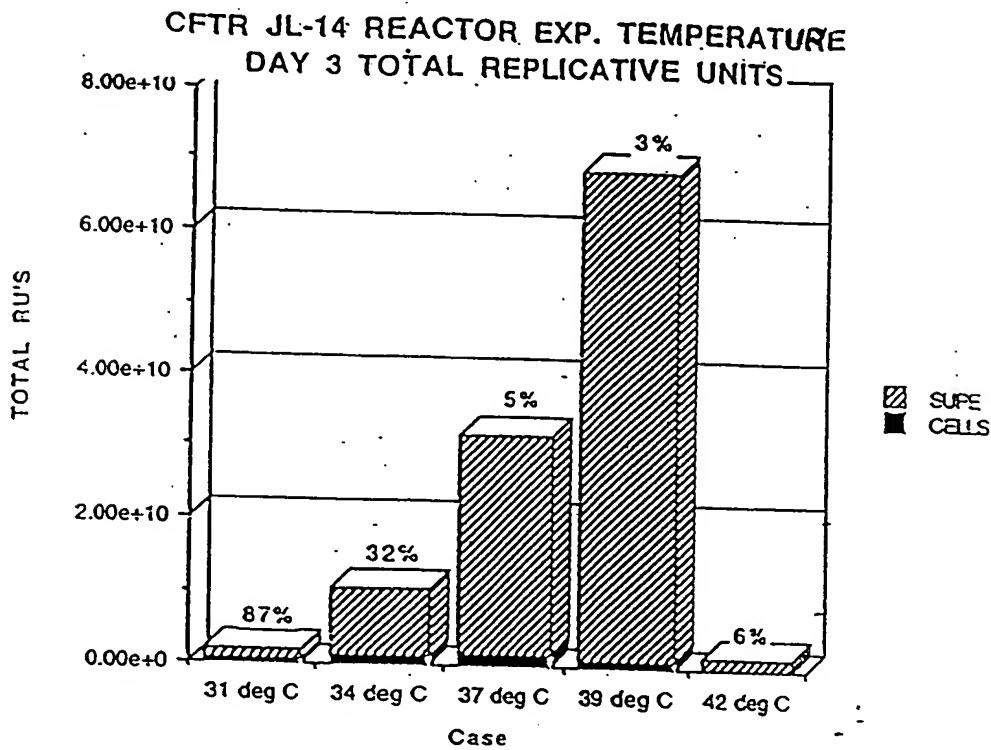
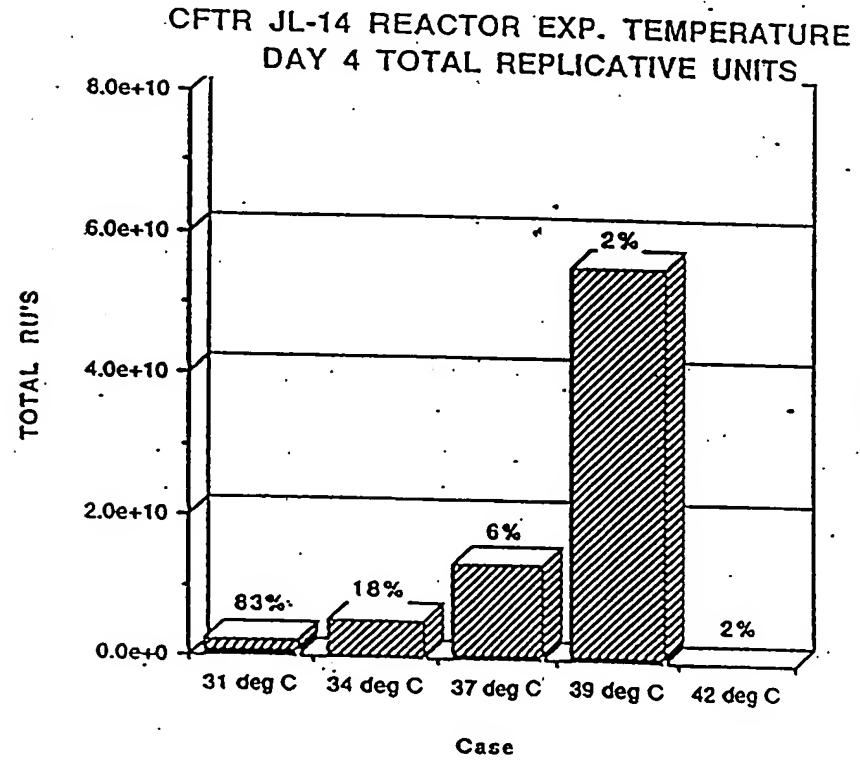


Figure 22A

B



C



Figures 22B and 22C

CFTR JL-14 Feed Experiment II  
Total DRP's - Day 3 Supe

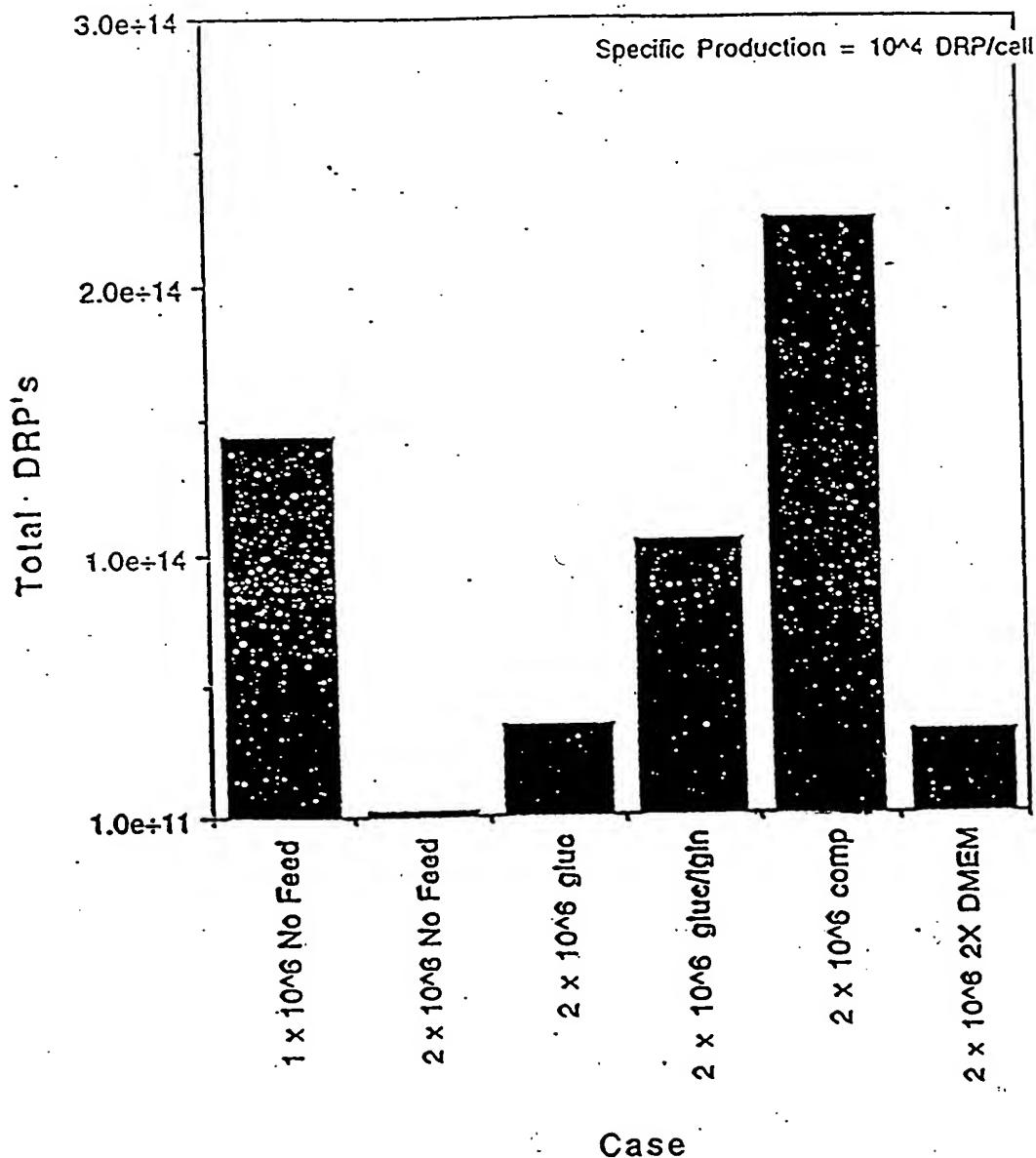


Figure 23

CFTR JL-14 Feed Experiment II  
Total RU's - Day 3 Supe

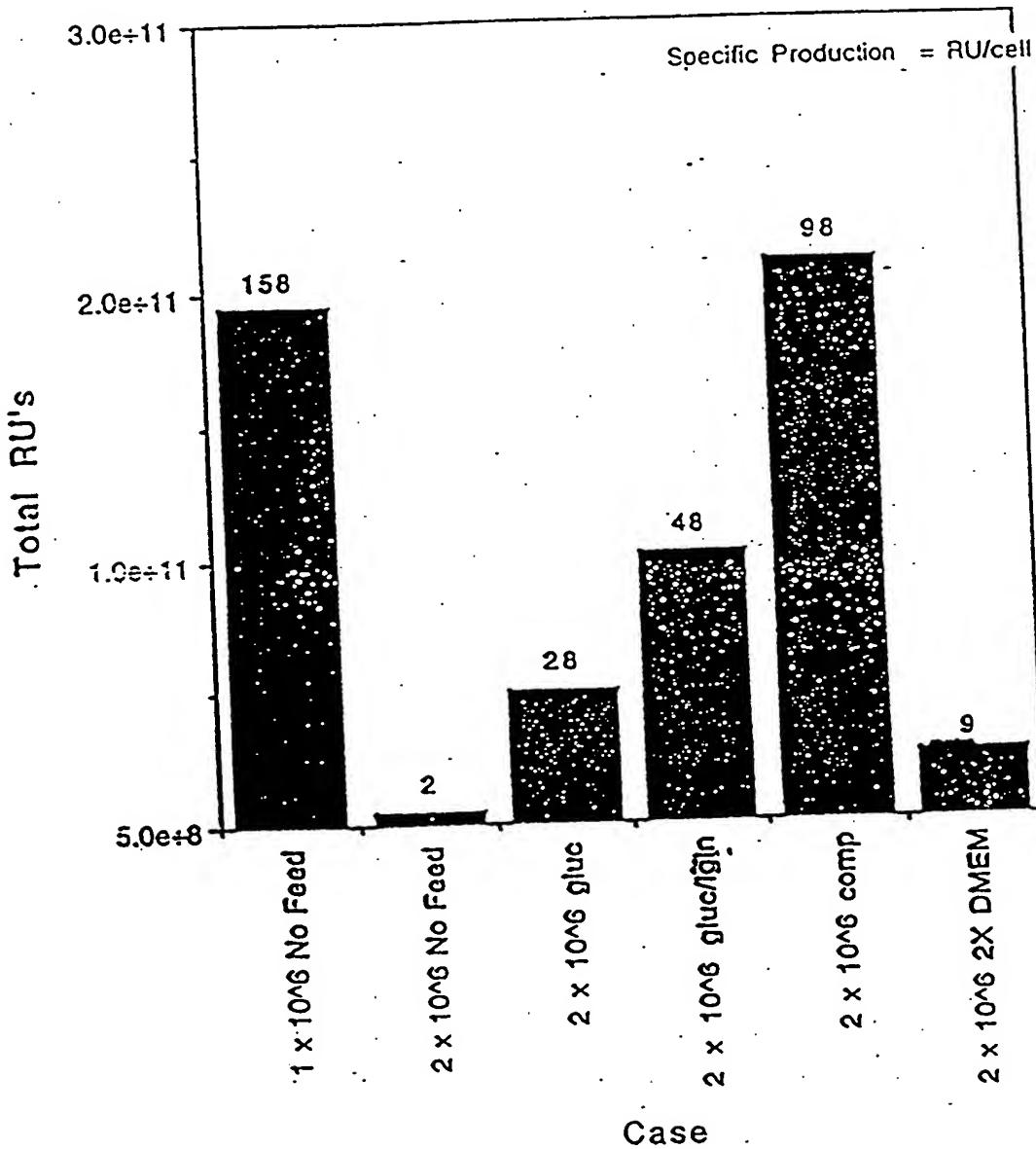


Figure 24

CFTR JL-14 Feed Experiment II.  
P/I ratio - Day 3 Supe

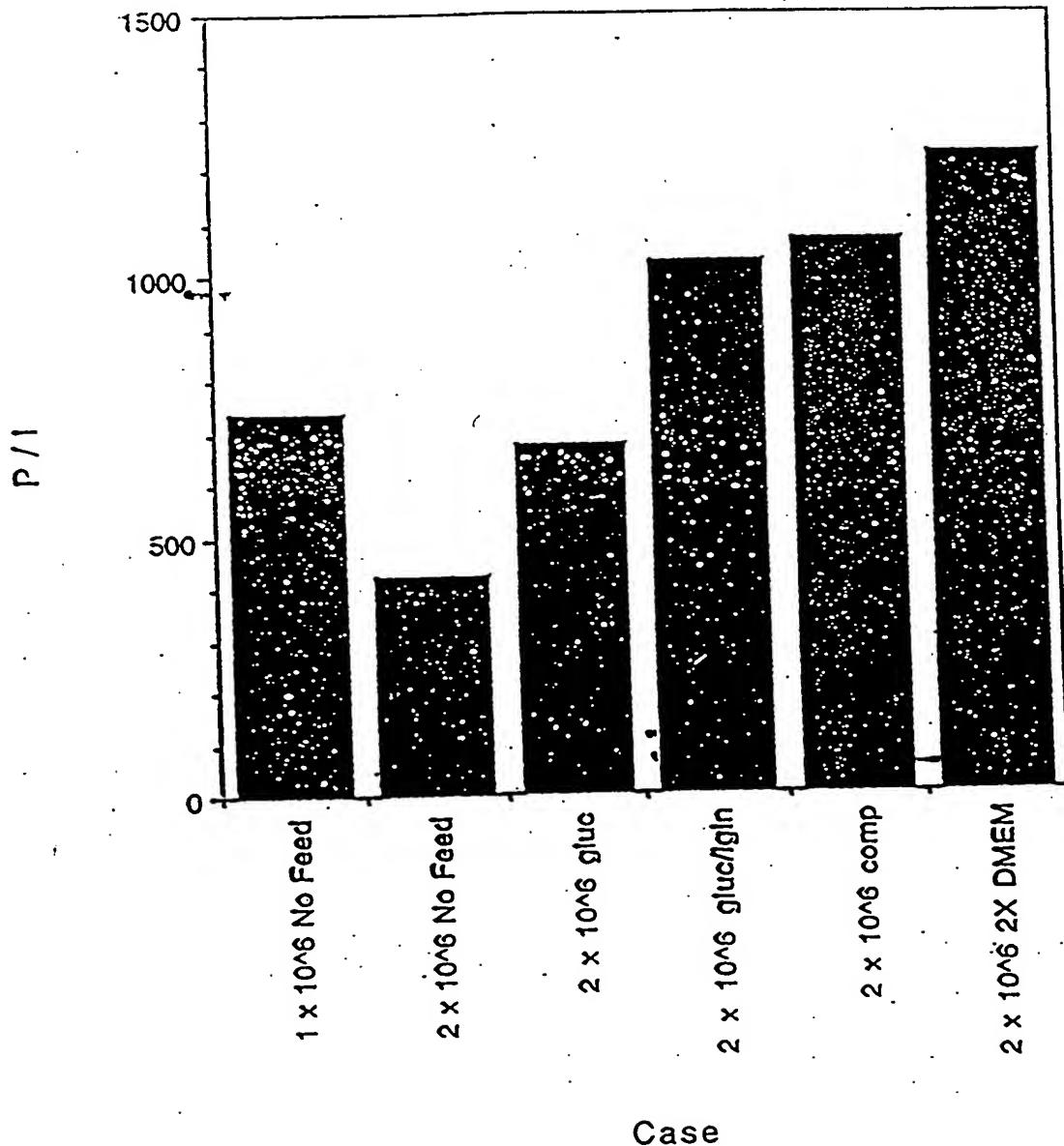


Figure 25

Lactalbumin Hydrolysate w/Earle's Salts (ELH)		
Base Cat No.	11250	11800
Component	1X Liquid mg/L	Powder mg/L
INORGANIC SALTS:		
CaCl <sub>2</sub> (anhyd.)	200.00	200.00
KCl	400.00	400.00
MgSO <sub>4</sub> (anhyd.)	97.67	97.70
NaCl	6800.00	6800.00
NaHCO <sub>3</sub>	2200.00	-
Na <sub>2</sub> HPO <sub>4</sub> · H <sub>2</sub> O	140.00	140.00
OTHER COMPONENTS:		
D-Glucose	1000.00	1000.00
Lactalbumin Hydrolysate	6500.00	5000.00
Phenol Red	10.00	10.00

MEM Amino Acids Solutions <sup>2</sup>		
Base Cat No.	11136	21135
Component	50X Liquid mg/L	50X Liquid mg/L
AMINO ACIDS:		
L-Arginine	6320.00	6320.00
L-Cystine	1200.00	1200.00
L-Glutamine	-	14600.00
L-Histidine-HCl-H <sub>2</sub> O	2100.00	2100.00
L-Isoleucine	2625.00	2625.00
L-Luecine	2620.00	2620.00
L-Lysins HCl	3625.00	3625.00
L-Methionine	755.00	755.00
L-Phenylalanine	1650.00	1650.00
L-Threonine	2380.00	2380.00
L-Tryptophan	510.00	510.00
L-Tyrosine	1800.00	1800.00
L-Valine	2340.00	2340.00

References:

1. Eagle, H. (1955) Proc. Soc. Exp. Biol. Med. 89, 362.
2. Eagle, H. (1959) Science 130, 432

MEM Non-Essential Amino Acids Solution <sup>2</sup>	
Base Cat No.	11140
Component	100X Liquid mg/L
AMINO ACIDS:	
L-Alanine	890.00
L-Asparagine	1500.00
L-Aspartic	1330.00
L-Glutamine	1470.00
Glycine	750.00
L-Proline	1150.00
L-Serine	1050.00

MEM Vitamin Solutions <sup>2</sup>	
Base Cat No.	11120
Component	50X Liquid mg/L
NaCl	8500.00
D-Ca Pantothenate	100.00
Choline Chloride	100.00
Folic Acid	100.00
I-Inositol	200.00
Nicotinamide	100.00
Pyridoxal-HCl	100.00
Riboflavin	10.00
Thiamine HCl	100.00

Figure 26

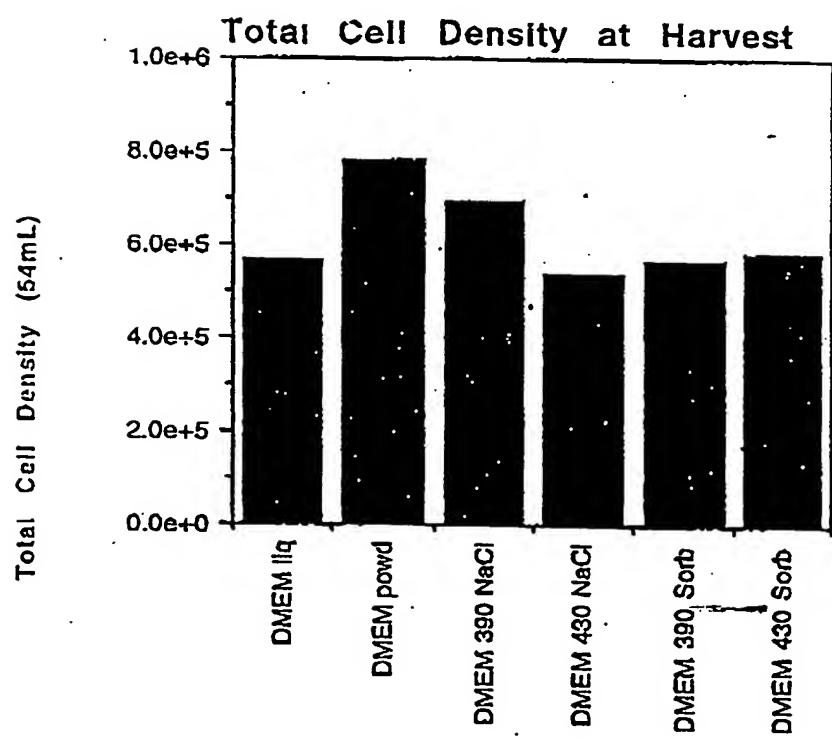


Figure 27

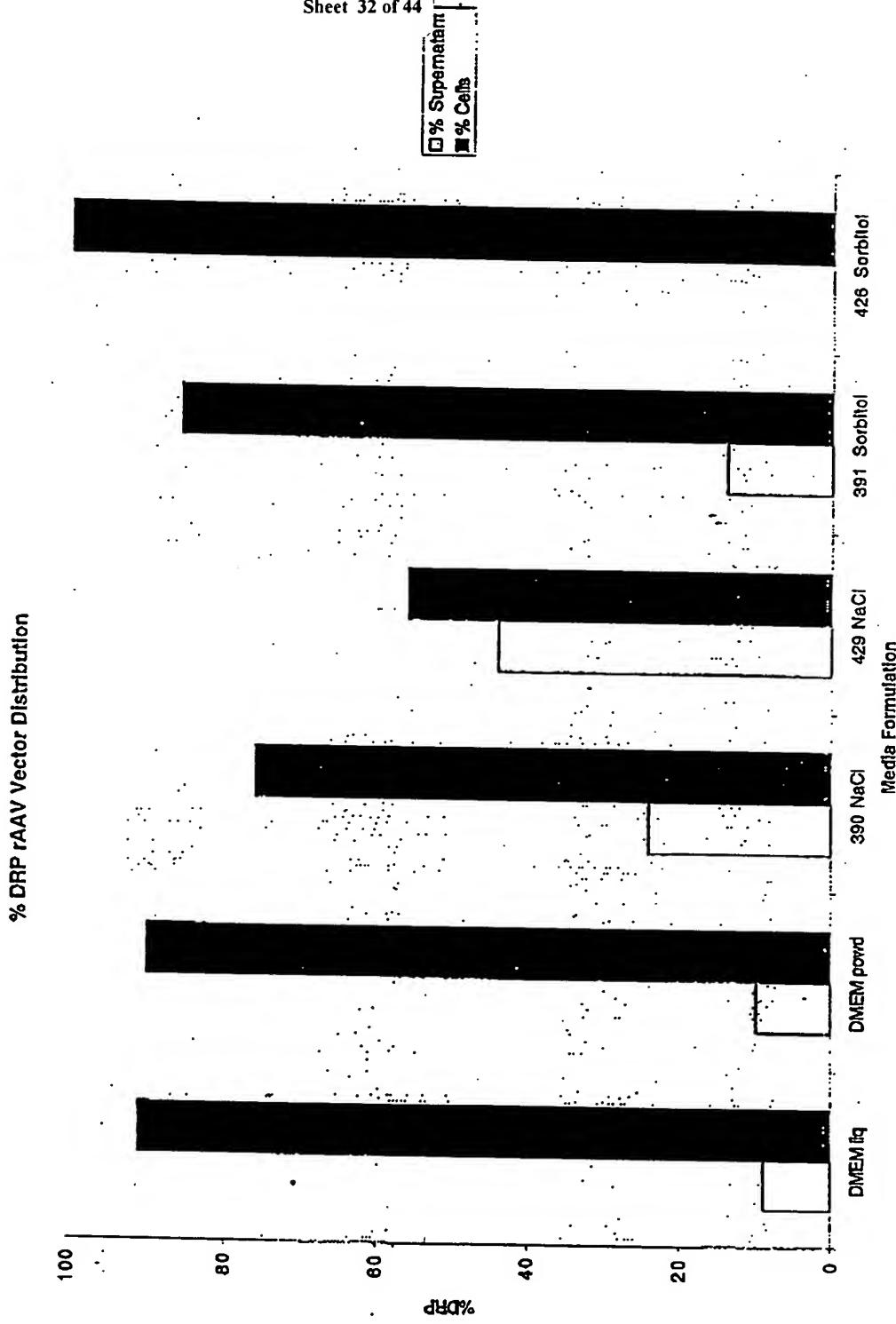


Figure 28

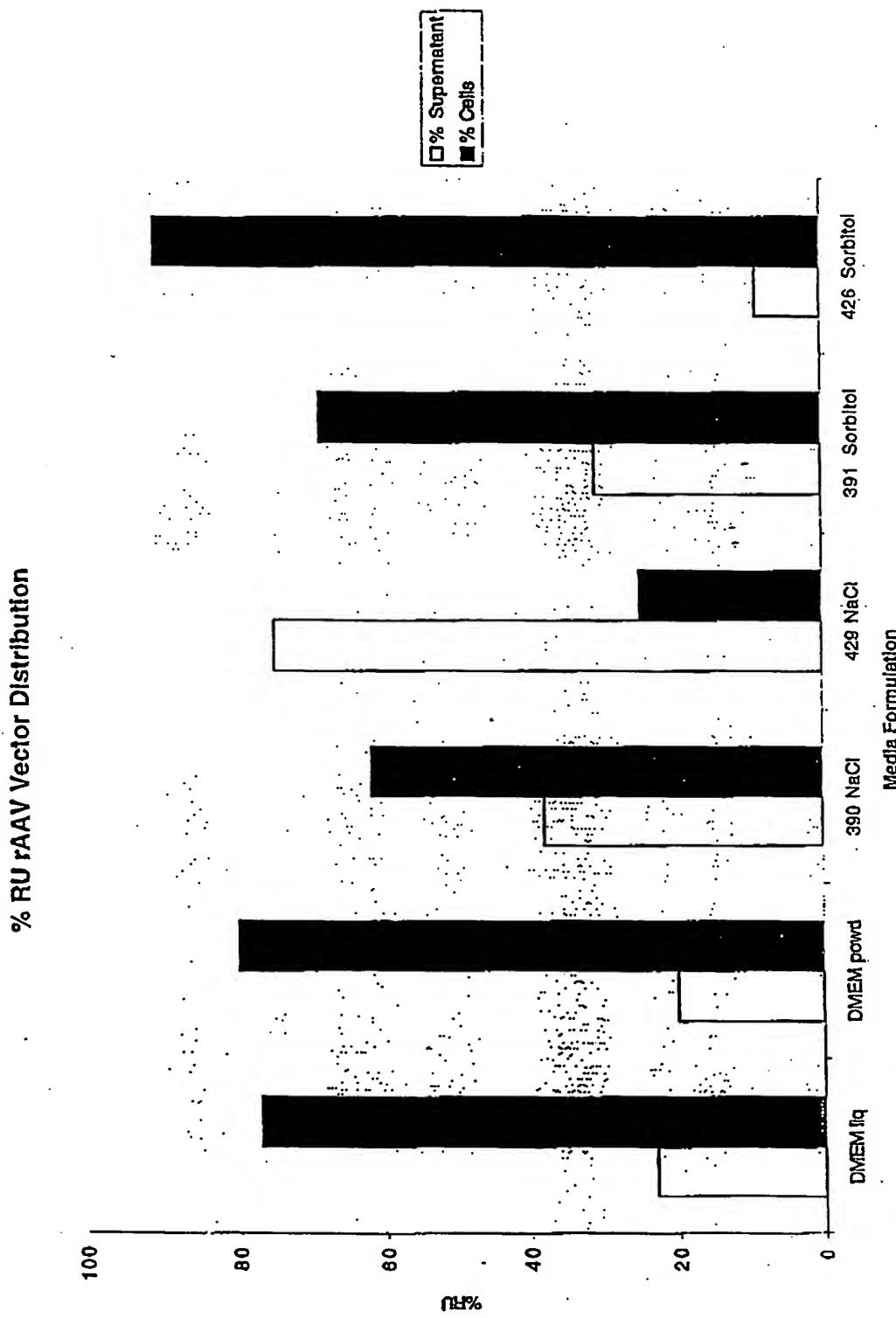


Figure 29

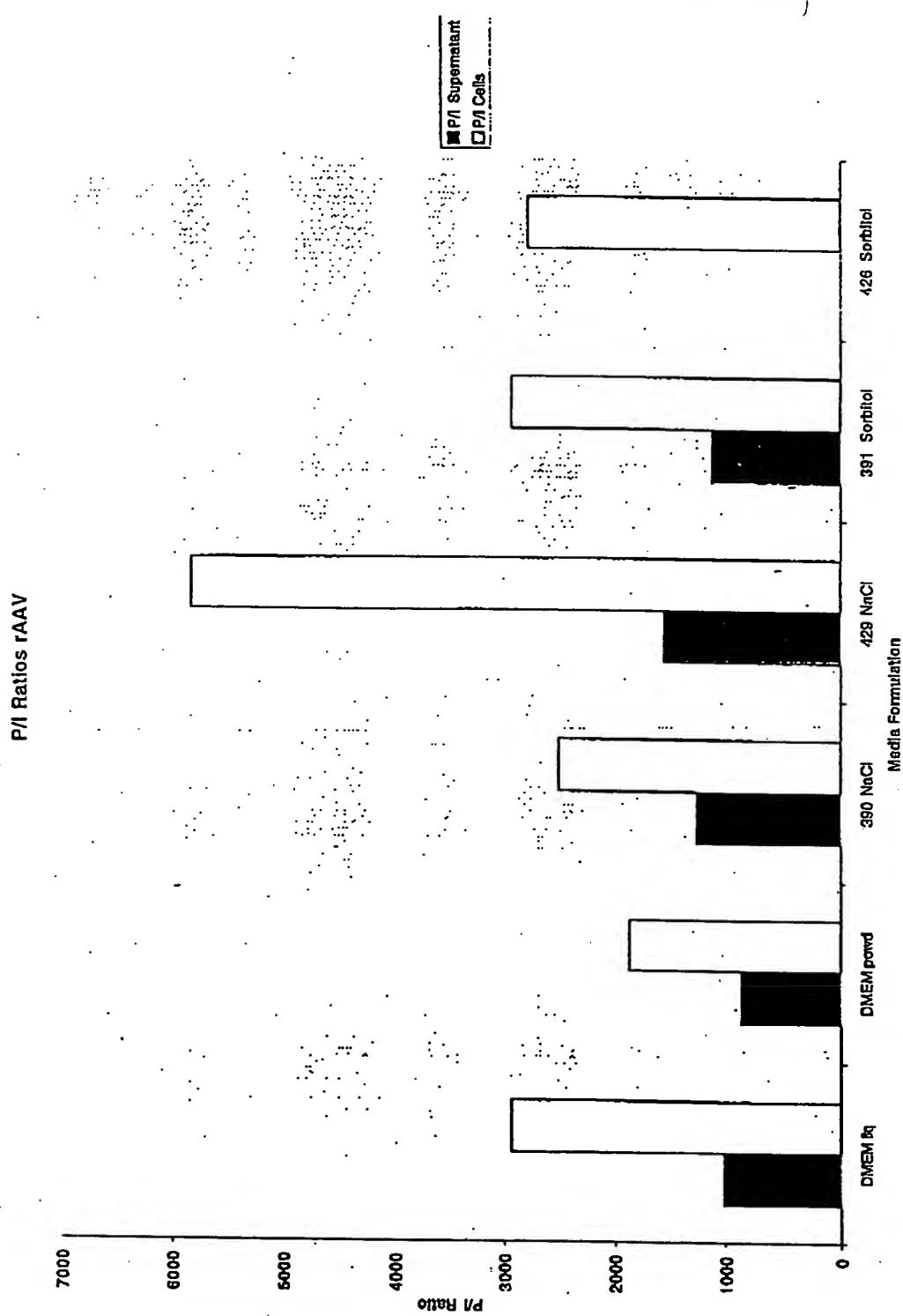
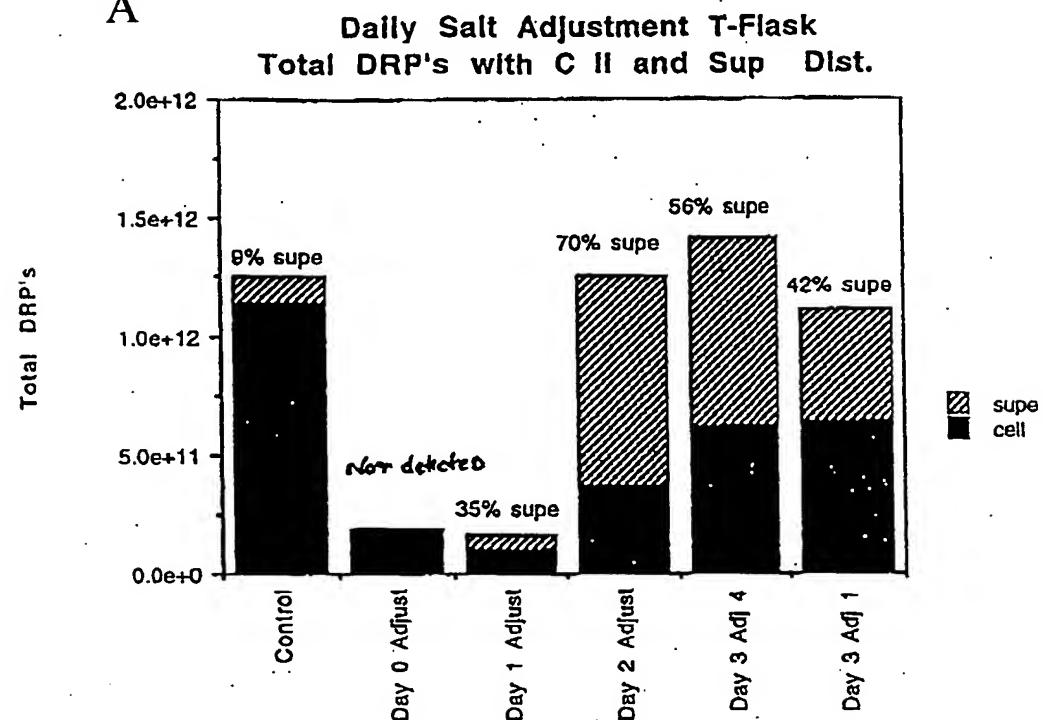


Figure 30

A



B

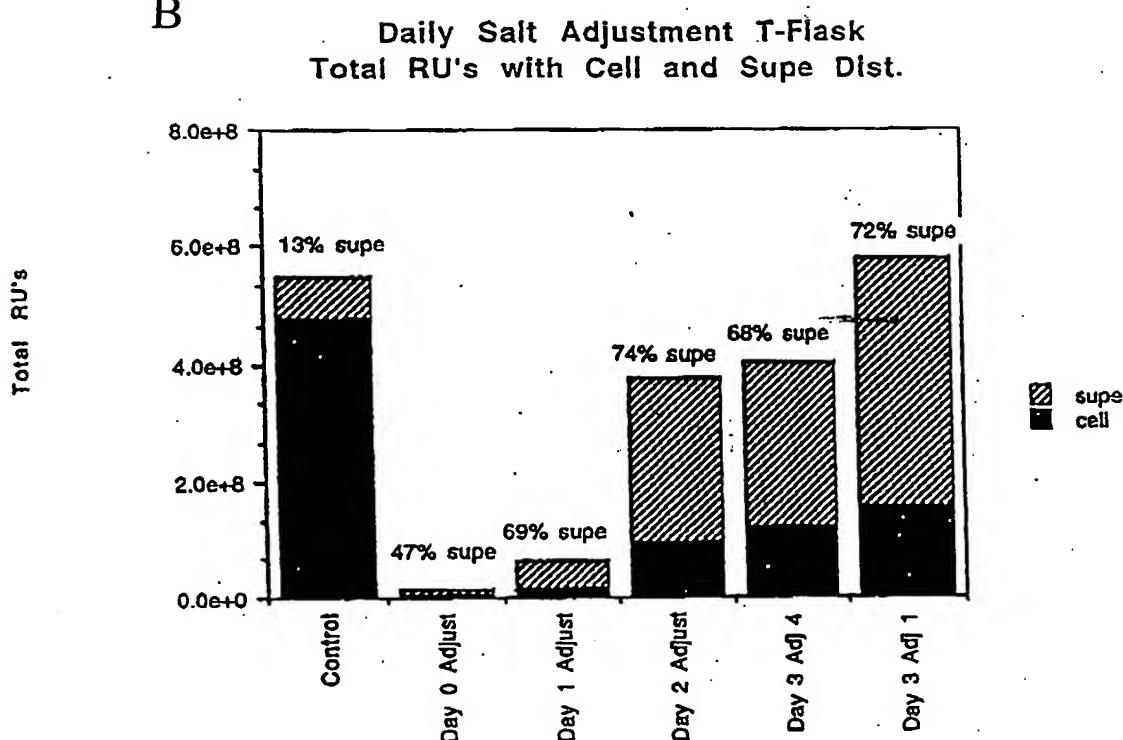


Figure 31

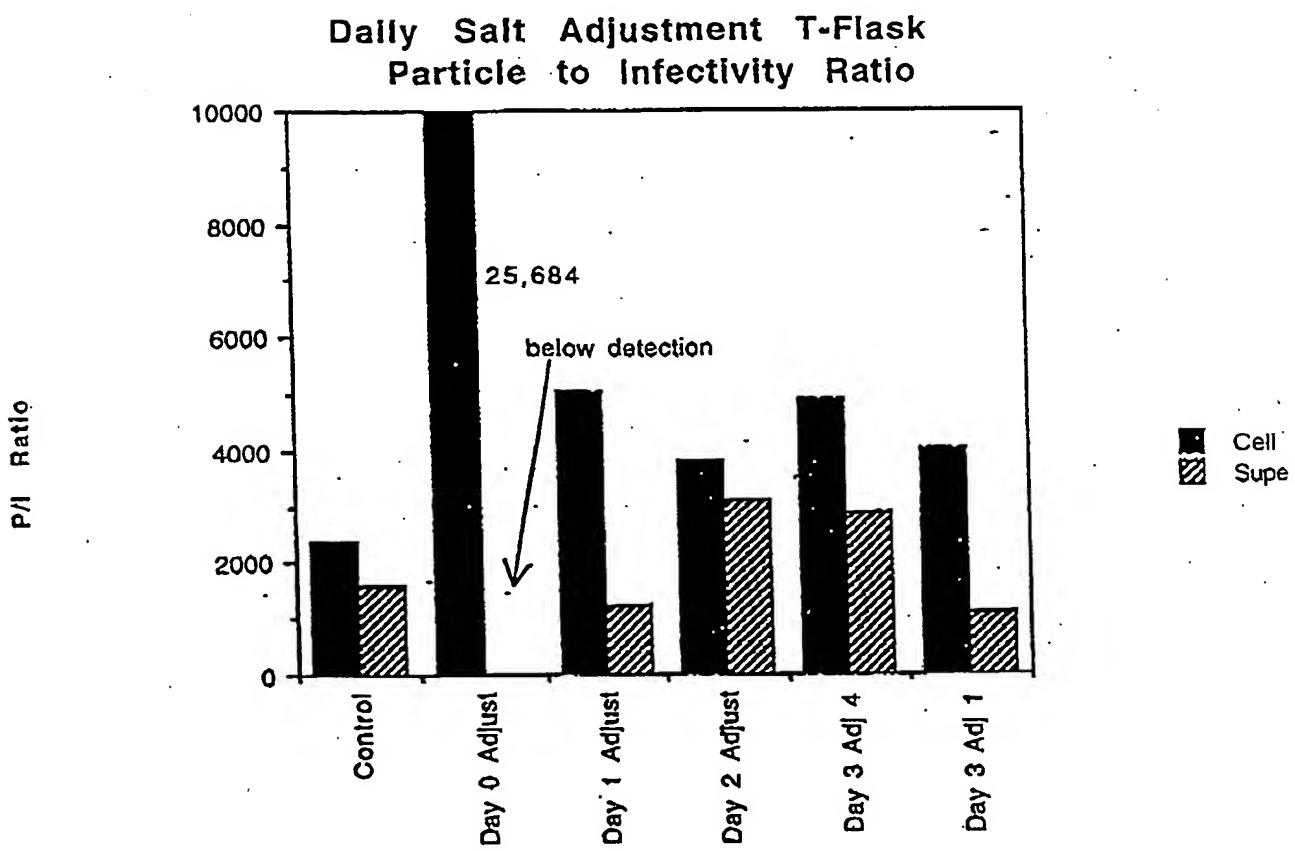
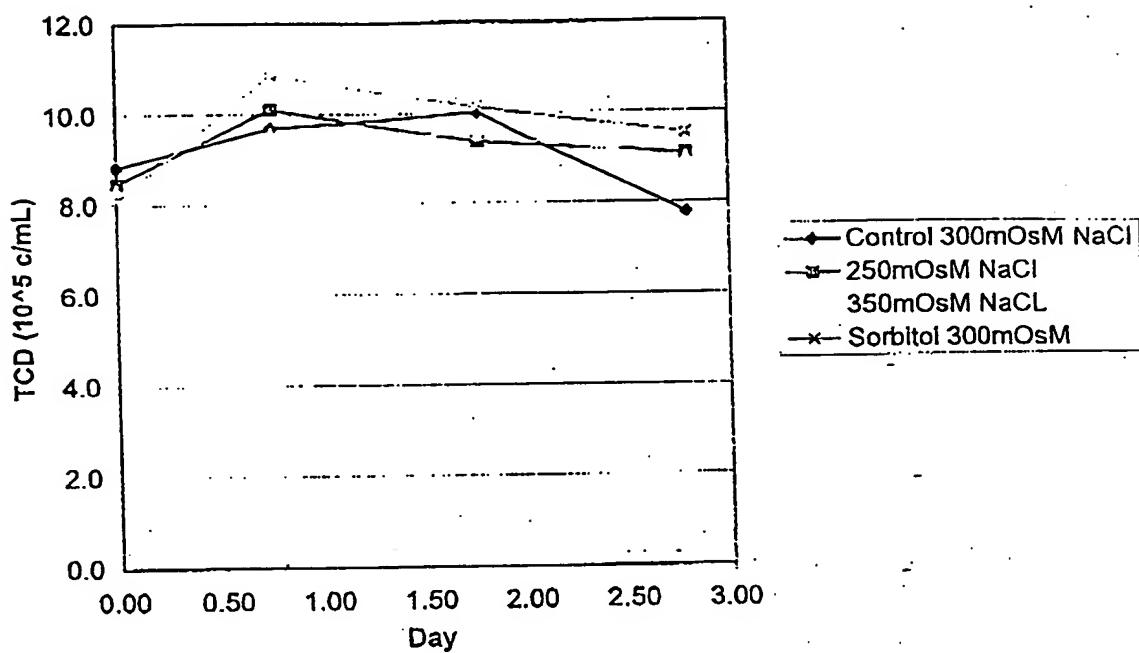


Figure 32

A

Total Cell Density



B

Total Cell Density

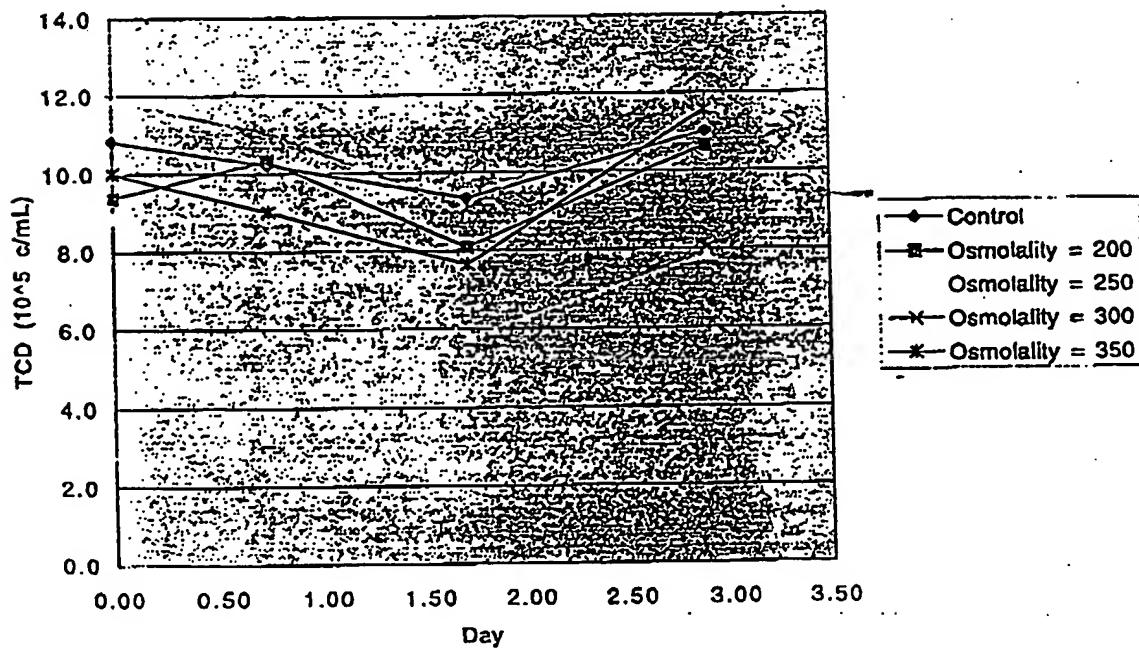
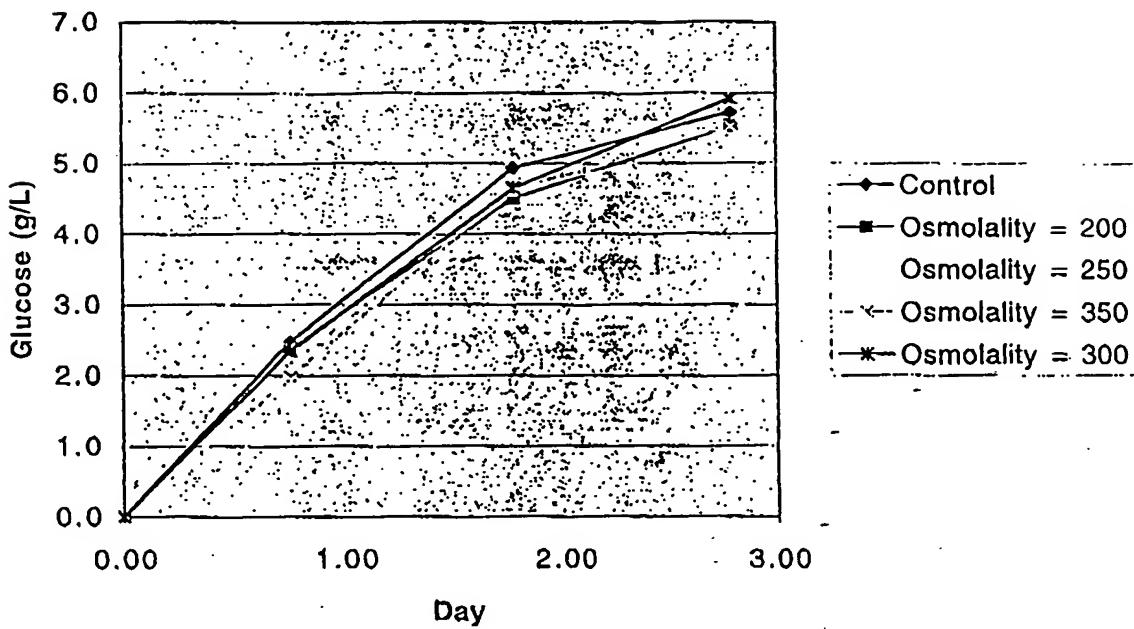


Figure 33

A

Cumulative Glucose Consumed



B

Cumulative Glucose Consumed

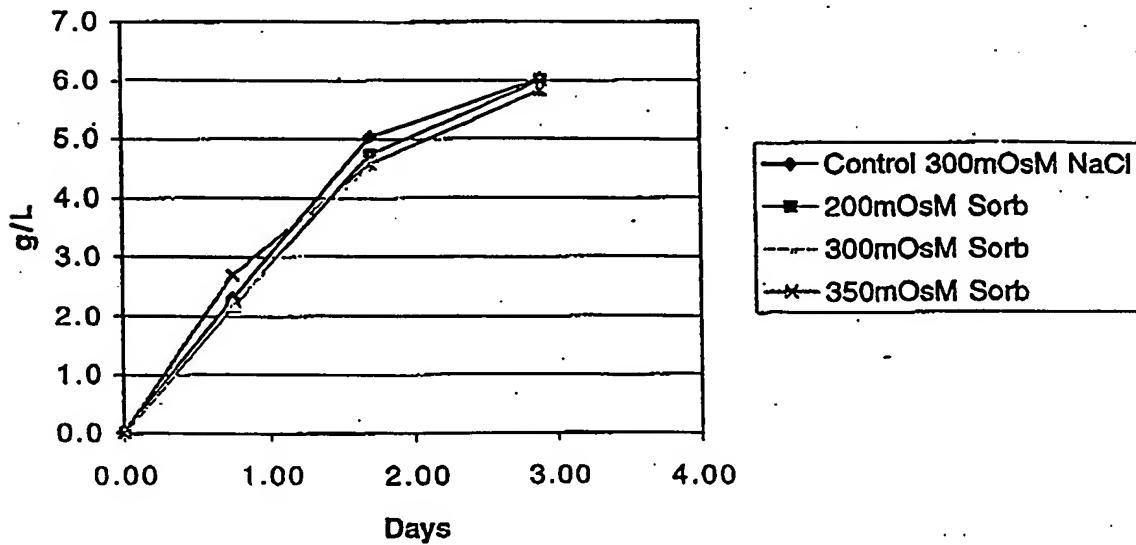
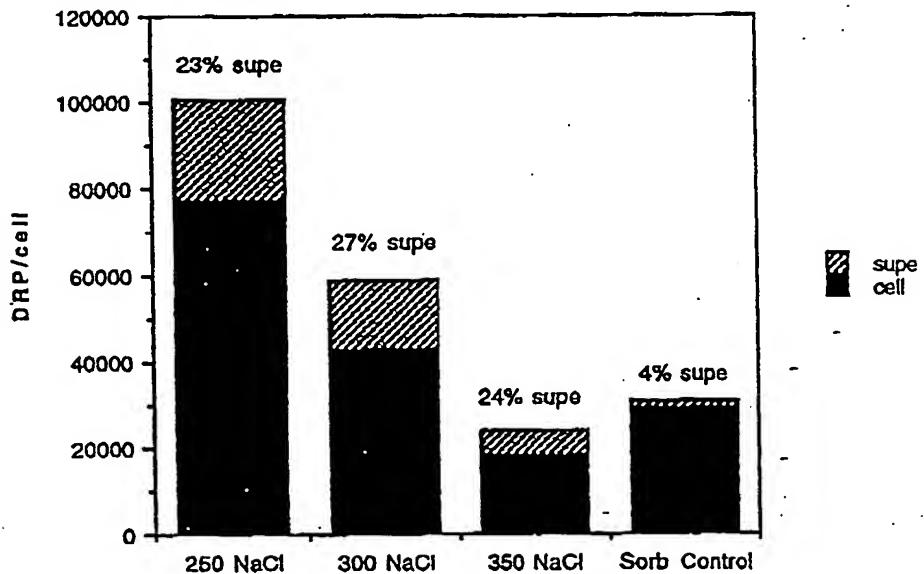


Figure 34

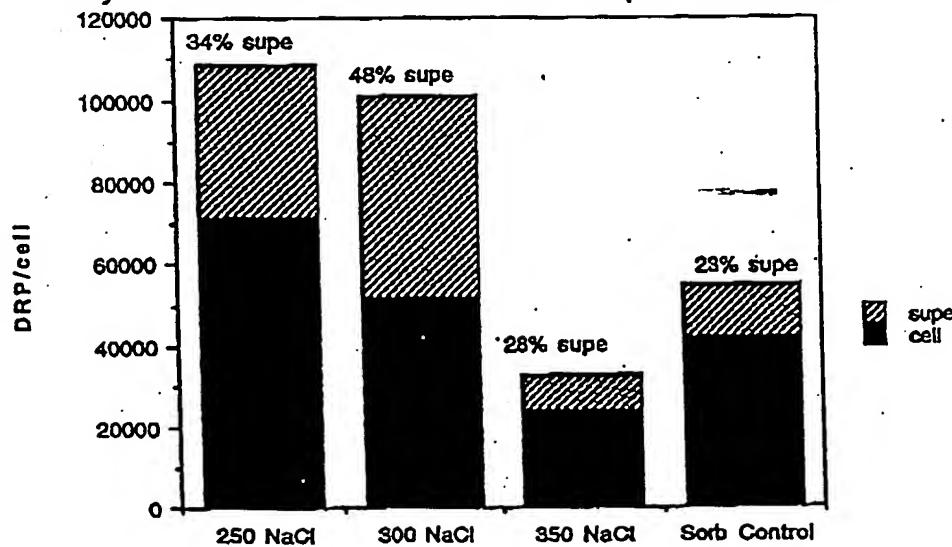
A

Bioreactor Osmolality Experiment (NaCl)  
Day 2 DRP/cell with Cell and Supe Distribution



B

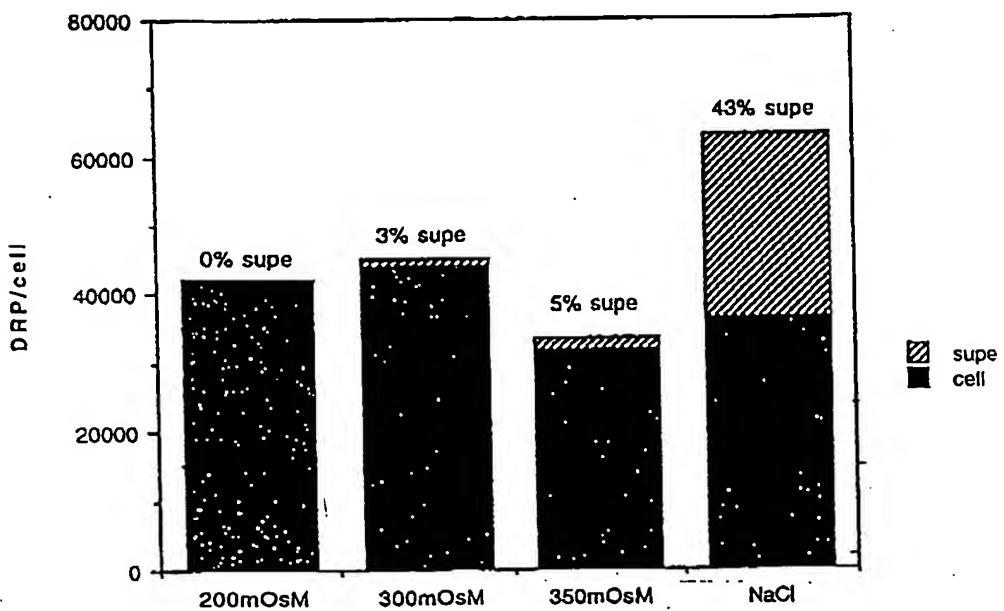
Bioreactor Osmolality Experiment (NaCl)  
Day 3 DRP/cell with Cell and Supe Distribution



Figures 35A and 35B

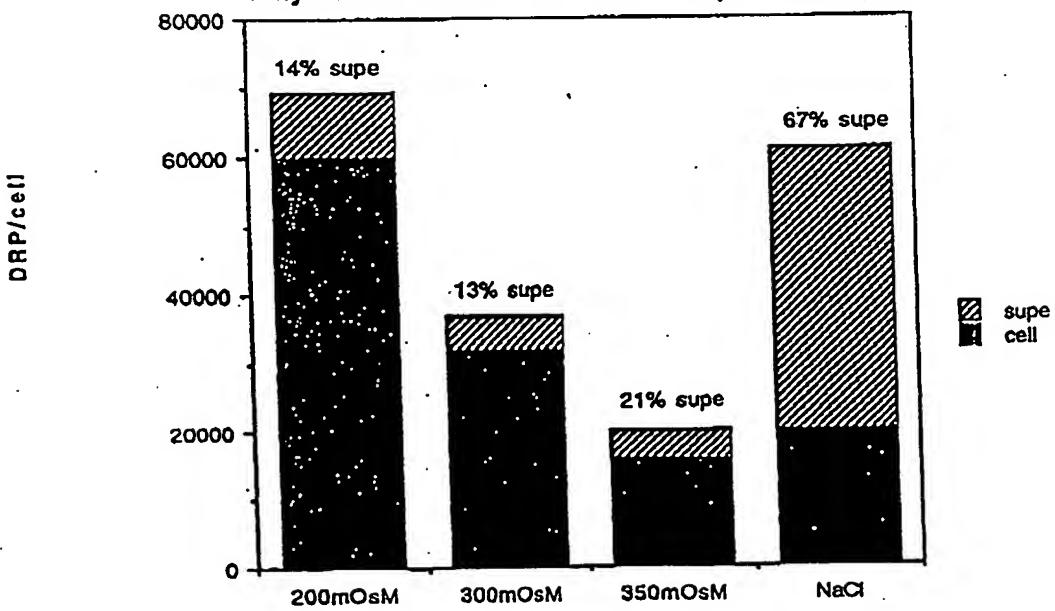
C

Bioreactor Osmolality Exp. (Sorbitol)  
Day 2 DRP/cell Cell and Sup Distribution



D

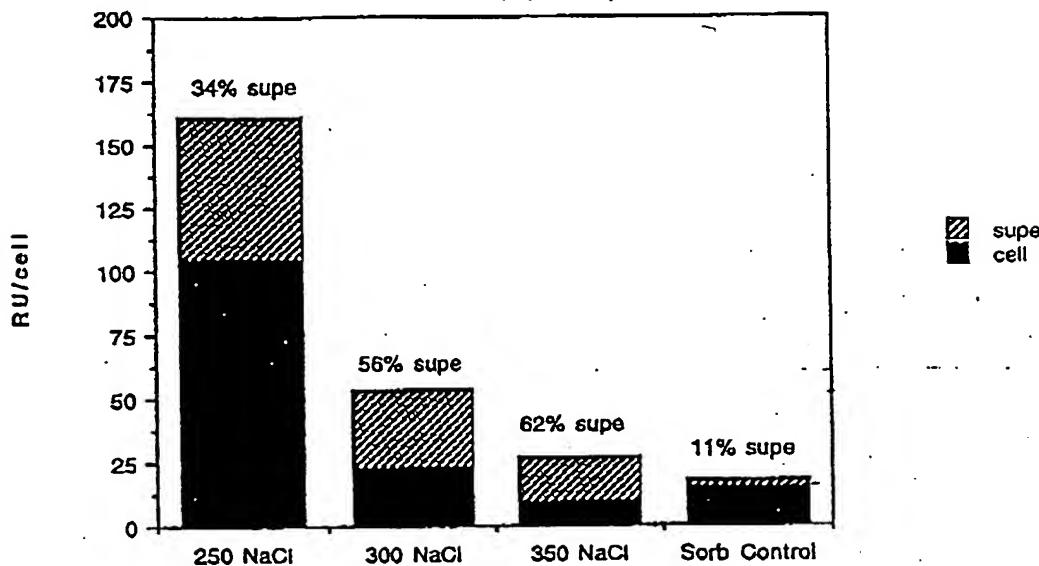
Bioreactor Osmolality Exp. (Sorbitol)  
Day 3 DRP/cell Cell and Sup Distribution



Figures 35C and 35D

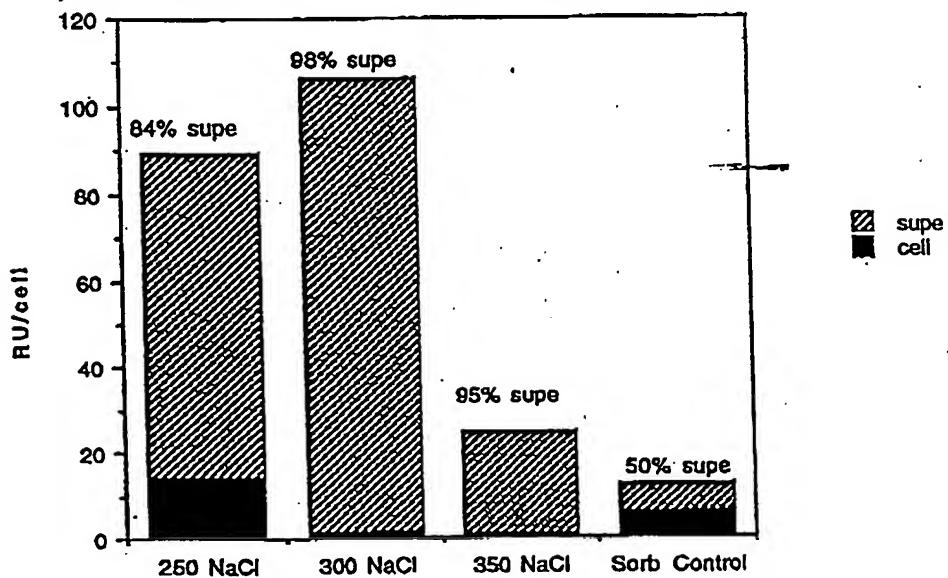
A

Bioreactor Osmolality Experiment (NaCl)  
Day 2 RU/cell with Cell and Supe Distribution



B

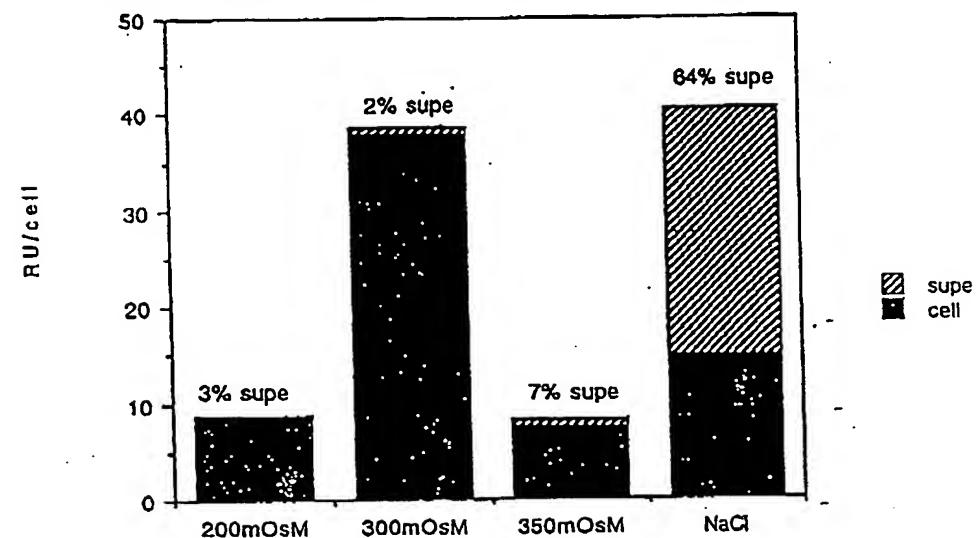
Bioreactor Osmolality Experiment (NaCl)  
Day 3 RU/cell with Cell and Supe Distribution



Figures 36A and 36B

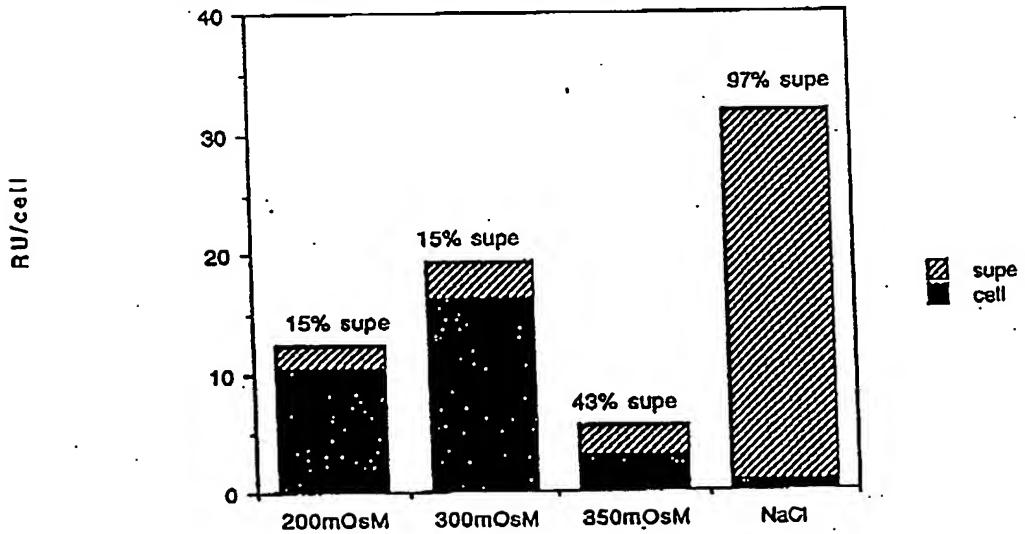
C

Bioreactor Osmolality Exp. (Sorbitol)  
Day 2 RU/cell with Cell and Sup. Distribution



D

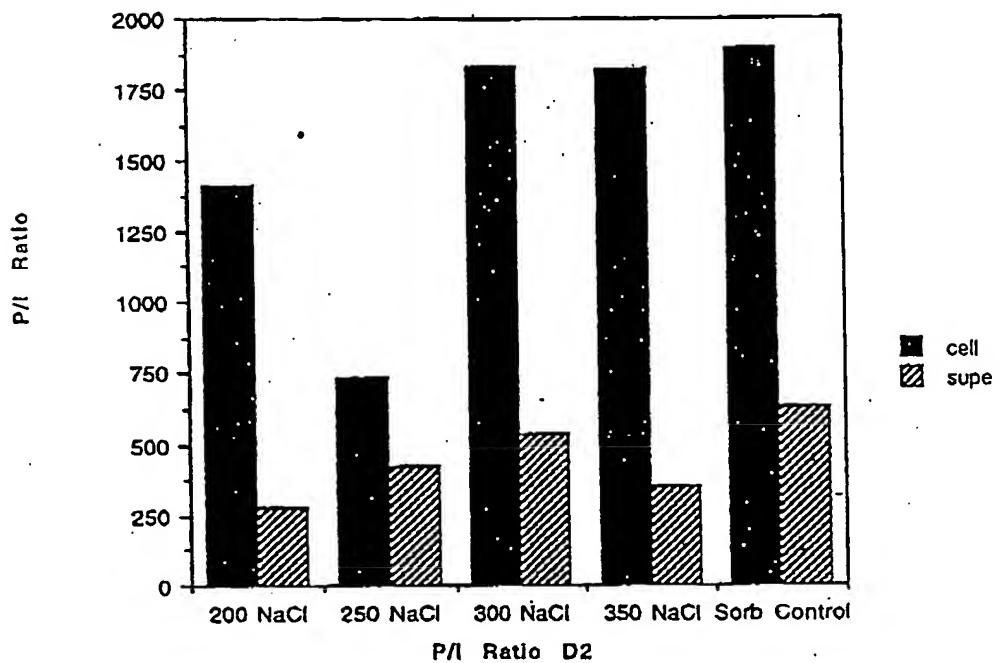
Bioreactor Osmolality Exp (Sorbitol)  
Day 3 RU/cell with Cell and Sup. Distribution



Figures 36C and 36D

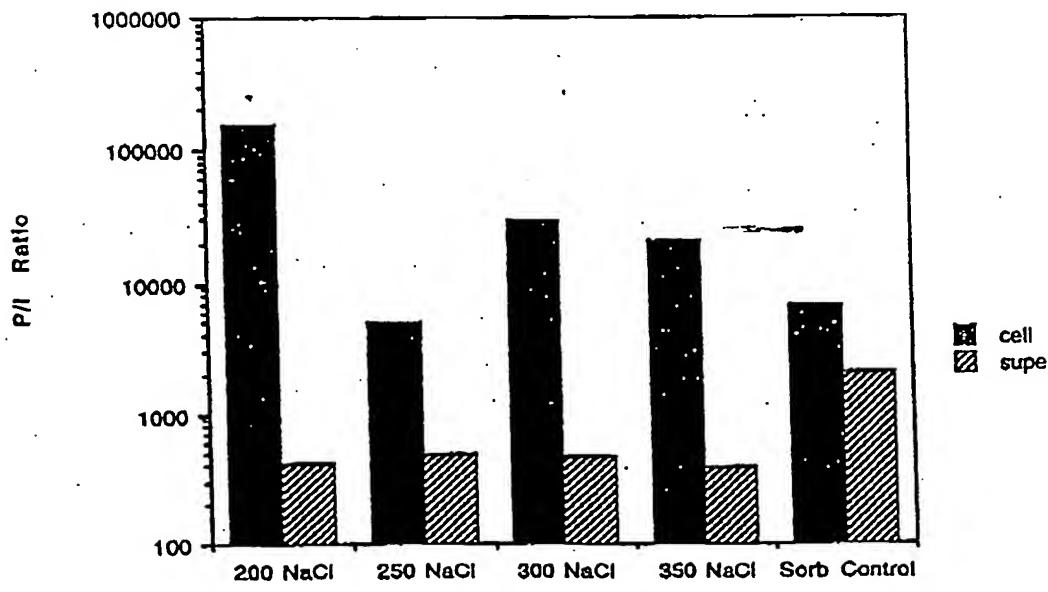
A

Bioreactor Osmiality Experiment (NaCl)  
Day 2 Particle to Infectivity Ratio



B

Bioreactor Osmiality Experiment (NaCl)  
Day 3 Particle to Infectivity Ratios

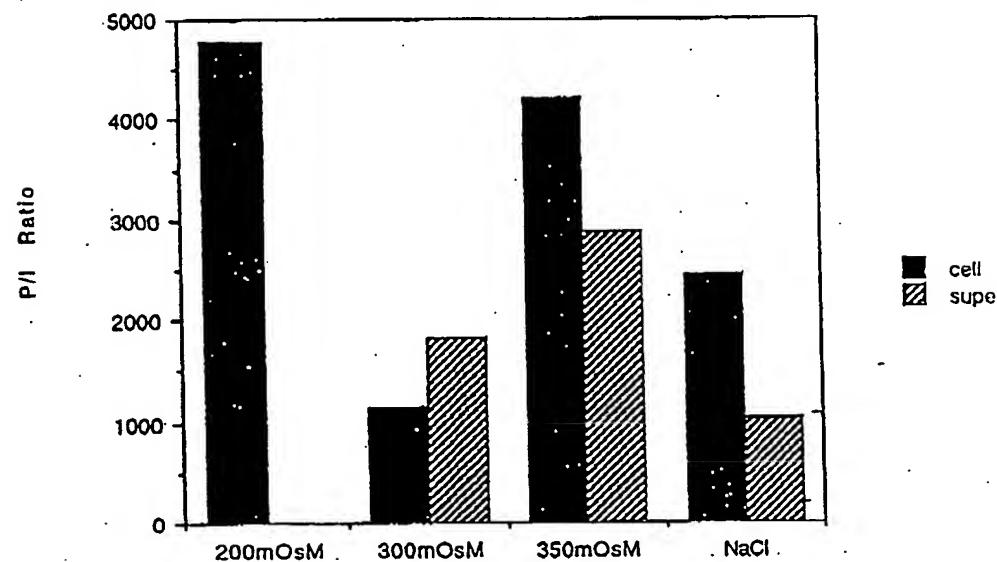


\*Base dump between day 2 and day 3.

Figures 37A and 37B

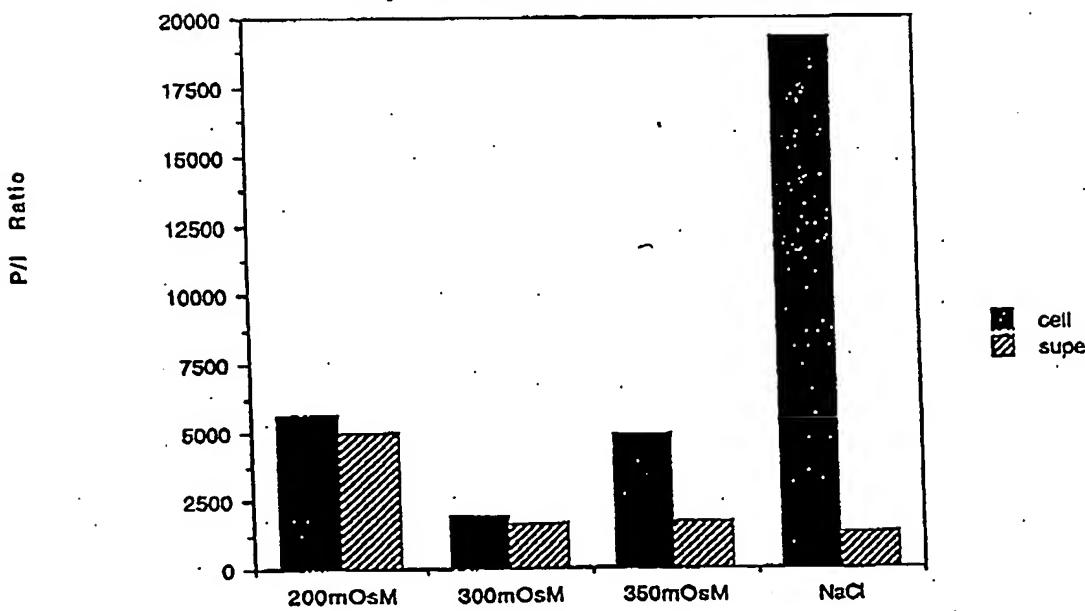
C

Bioreactor Osmolality Exp. (Sorbitol)  
Day 2 Particle to Infectivity Ratio



D

Bioreactor Osmolality Exp. (Sorbitol)  
Day 3 Particle to Infectivity Ratio



Figures 37C and 37D